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Position Paper

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The ROI of AI Ethics

Profiting with Principles for the Future

AI ETHICS | RESPONSIBLE INNOVATION | ROI MODELS

Introduction

As artificial intelligence (AI) technologies advance at an unprecedented pace, organizations must effectively assess both the benefits and risks associated with their adoption. While AI has the potential to unlock efficiencies, drive innovation, and create immense value, its rapid implementation raises critical questions about ethical boundaries and responsible use. In today's business landscape, the ethical and responsible deployment of AI systems is not merely a nice-to-have—it is an essential foundation for long-term success (TrustCloud; Knutson 2024; Cogent Info 2024; Esperanca 2024). Unchecked AI systems can introduce biases, threaten data privacy, and lead to compliance breaches, highlighting the importance of embedding AI risk management frameworks (Trinckes; Hyperproof). Studies have shown that a lack of clear ethical guardrails can have serious societal and organizational consequences (Radiol 2023; Leslie 2019).

This paper explores the intersection of return on investment (ROI) and AI ethics, making a compelling case for why prioritizing ethical considerations in AI implementation is not only a moral imperative but also a strategic business decision. Significant consequences are revealed upon closer examination of the financial, reputational, and operational risks that arise from neglecting ethics considerations or unethical AI practices (SCoRe 2025; EY 2025).

Through a combination of theoretical foundations, practical frameworks, and real-world case studies, we uncover how aligning ethical principles with AI strategies can transform a potential liability into a key competitive advantage. We expand on the concept of ethical AI ROI—a holistic approach to measuring the value of responsible AI practices that goes beyond traditional financial metrics to encompass factors such as risk mitigation, customer trust, and long-term sustainability.

Central to this paper is a proposed ethical AI ROI calculator, a tool designed to help technology practitioners, along with leaders in business, government, and organizations, assess the potential returns and risks associated with their AI initiatives. By inputting relevant data points and considering a range of ethical factors, users could generate custom ROI projections and make data-driven decisions about prioritizing ethical AI practices.

As businesses, regulators, and society grapple with the profound implications of AI, the ability to effectively measure and justify the ROI of ethical AI will be a key differentiator. Trust has emerged as a critical global issue across sectors, as businesses, governments, and technology companies increasingly confront technology-related risks. This shift has led to growing calls for renewed focus on transparency, accountability, and responsible practices to rebuild and maintain stakeholder confidence (SCoRe 2025; EY 2025). Organizations that proactively embed ethical considerations into their AI strategies will be better positioned to build trust with investors and customers, attract top talent, and navigate an increasingly complex regulatory landscape.

Through actionable insights and practical tools, this paper empowers businesses, governments, and organizational leaders to integrate ethics into their AI implementations and drive sustainable value creation. By embracing ethical AI as a strategic imperative, organizations can foster innovation, build resilience, and shape a future in which the transformative potential of AI is harnessed for the benefit of all stakeholders.

01

ROI Concepts and Models

Traditional ROI measures financial returns by comparing profits to investment costs, focusing on quantifiable metrics like revenue and cost savings (Lockert and Safane). For example, the standard return on investment is calculated in the following way (Investing Answers 2025):

Traditional ROI Formula: ROI = (Net Profit / Cost of Investment) × 100%

Where:

- Net Profit = Total gains from the investment minus the total costs.
- Cost of Investment = Initial expenditure on the technology.

An example of traditional ROI is where a company invests $50,000 in new project management software. Over a year, this software has led to operational efficiencies, resulting in additional revenue of $70,000. The ROI is calculated as: ROI = ($70,000 − $50,000 / $50,000) × 100% = 40%, indicating a 40% return on the initial investment.

AI ROI takes into account different factors for determining its return on investment (Walch 2024). With an 82 to 93 percent failure rate of AI projects, the stakes are high (Kahn 2022). Specific to AI systems investments, an evaluation of the return prioritizes performance metrics, considers the value gained and experience delivered by implementing AI technologies and solutions, including both “soft” and “hard” returns (Vethanayagam 2024). By leveraging these models and measurement strategies, many organizations manage their AI portfolios and set ROI expectations to maximize the value of their AI investments across different time horizons and innovation types.

For example, combining McKinsey’s Horizon Innovation Model and Deloitte’s Opportunity Matrix measuring AI ROI involves the following (Lucid; Deloitte):

- Defining clear goals and KPIs for each AI initiative.
- Establishing baselines before AI implementation.

- Tracking both tangible (e.g., revenue and cost savings) and intangible (e.g., patents and customer satisfaction) benefits.
- Using long-term metrics for more speculative AI projects, such as five-year rolling averages.
- Regularly reassessing and optimizing AI investments based on performance data.

ROI of governance, risk, and compliance (GRC), with more complex considerations, requires more considerations and essential components such as AI governance (AIG) platforms to serve as the foundation for AI strategy, implementation, and ongoing management (Cogent Info 2024; IBM). These platforms aim to transform AI governance from mere compliance to a competitive advantage, leading to business transformation. Looking across industries and organizations to find well-defined ROI strategies being developed and implemented led to emerging models collaborating to meet challenges in AI governance. CredoAI, a venture-funded start-up, is at the forefront of this transformation, automating AIG processes and enabling collaboration (Business Wire 2024). As an API–first platform, it integrates with enterprise systems and development platforms, tracking and certifying enterprise vendor systems while providing a collaboration platform for internal enterprise groups.

Benefits of AI governance platforms:

- **Risk Management:** AIG platforms help organizations identify and mitigate AI–related risks, ensuring responsible AI development and deployment.
- **Compliance:** These platforms assist in adhering to emerging global regulations and standards, such as the EU AI Act, NIST, IEEE, and ISO.
- **Transparency and Accountability:** AIG platforms promote transparency in AI decision-making processes, addressing concerns around privacy and civil liberties.
- **Efficiency and Quality:** Well-managed AI systems lead to better, more reliable, and transparent decision-making, increasing the effectiveness of the technology.
- **Ethical AI Implementation:** AIG platforms ensure AI technologies are ethical, transparent, and aligned with human values and societal norms.

For Example: Mastercard Case Study

The financial services sector, including Mastercard, faces significant pressure to establish robust AI governance due to its data-driven and digital-based business models. By implementing AI governance platforms, organizations can reduce compliance risks, improve efficiencies, and increase performance while maintaining ethical AI practices and fostering innovation. Key points from Mastercard's implementation of AI governance include the following:

- **AI Governance at Scale:** Mastercard partnered with Credo AI to create a scalable and reliable system for generative AI governance.
- **Centralized AI Control:** Implementation of centralized AI control and oversight through an AI registry and automation.
- **Enhanced Compliance:** Collaboration with Credo AI included a third-party AI vendor portal, enhancing compliance and risk management.
- **Innovation and Risk Management:** Mastercard balanced rapid AI deployment with robust risk management, appointing an executive steering committee and inviting employees to explore generative AI applications.
- **Hybrid Approach:** The case study underscores the importance of combining top-down strategies with bottom-up innovation to strike the right balance between control and enabling employees.

ROI of AI Ethics: As the concept of ROI of AI ethics has evolved, it has expanded beyond traditional financial metrics to encompass elements of GRC as well as a more holistic approach. Understanding AI ethics in the emerging landscape is key (Domin et al. 2024). As the term AI is increasingly used to ubiquitously describe all advanced technologies, clear, shared definitions are also crucial (MIT Technology Review 2024). Responsible tech is the umbrella term for responsible, impactful, and sustainable development of all technology. Responsible AI, as part of responsible tech, includes specific subsets in AI systems focusing on fairness, transparency, and safety. AI ethics goes further, applying principles for governing responsible AI development aligned with human values and well-being. Although there is no one global set of AI ethics, common shared ethical values include honesty, integrity, respect, fairness, and responsibility. These values are reflected in frameworks such as the Universal Declaration of Human Rights (UDHR) and the World Medical Association's International Code of Ethics (ICoME).

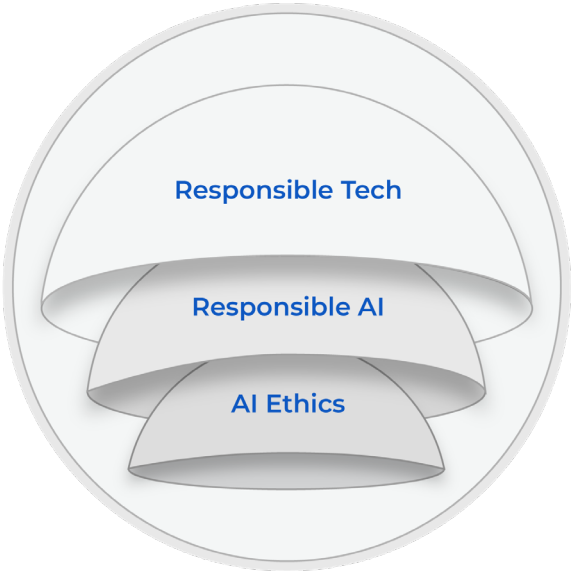

Figure 1. Responsible Tech, Responsible AI, AI Ethics

ROI of AI ethics, introduced by IBM and Notre Dame University, measures the value generated from integrating ethical principles into AI systems and practices (Institute for Ethics and the Common Good). Although the risks and benefits are dynamic as AI systems evolve and are deployed, we can develop frameworks, checklists, and iterative practices that can be applied in novel situations based on a wide range of impacts.

- Components:
    - Economic returns: Direct financial benefits and cost savings
    - Intangible returns: Brand reputation, stakeholder trust, and regulatory compliance

    - Real options: Future capabilities and flexibility
- Key considerations:
    - Social implications
    - Legal and regulatory compliance
    - Ethical dimensions
    - Reputational effects
    - Environmental consequences
- Measurement (mixed methods) (Radiya-Dixit 2025):
    - Quantitative: Financial metrics, reduced compliance costs
    - Qualitative: Improved stakeholder trust, enhanced brand value
- Time horizon:
    - Continuous assessment throughout the AI life cycle, balancing short-term and long-term impacts
- Stakeholders:
    - Customers, employees, society, regulators, and the environment
- Business impact:
    - Companies embracing AI ethics audits report twice the ROI compared to those who don't, demonstrating that financial gains can coexist with robust ethical considerations. Despite the potential $15 trillion value by 2030, an intention-action gap persists: only 20 percent of executives report alignment between AI ethics practices and stated principles. Companies embracing AI ethics audits report twice the ROI compared to those who don't, demonstrating that financial gains can coexist with robust ethical considerations.
- Challenges:
    - Difficulty in quantifying intangible benefits and balancing short-term goals with long-term ethical considerations

This expanded view of ROI in AI ethics emphasizes the importance of responsible AI development and deployment, aligning with global standards like UNESCO's Recommendation on the Ethics of Artificial Intelligence and the recent EU Act.

02

Comparing ROI Frameworks: Traditional ROI AI ROI, GRC ROI, and Ethical AI ROI

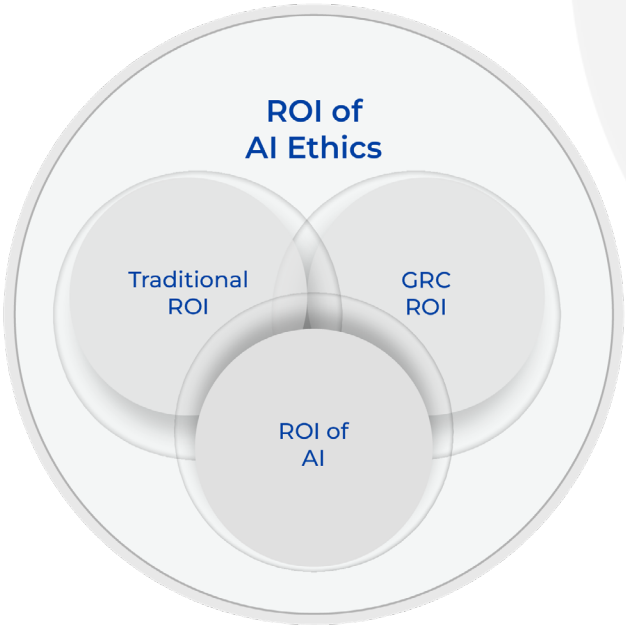

Figure 2. ROI Frameworks

Comparing and contrasting the traditional ROI formula with AI ROI, GRC ROI, and ethical AI ROI provides deeper insights into the complexity of aspects involved in calculating benefits and risks. The ROI of AI ethics requires a more comprehensive approach that incorporates both quantitative and qualitative metrics. Table 1 (below) presents a short comparison of the formulas, objectives and focus, value components, and risks, revealing key differences and gaps. For a full comparison table of categories, including time horizon, stakeholders, measurement of success, relevance in AI projects, and potential pitfalls, see the appendix.

TRADITIONAL ROI	AI ROI	GRC ROI	ETHICAL AI ROI
FORMULA			
ROI = Net Profit / Total Investment × 100 **Net Profit** = Total Revenue – Total Expenses	**AI ROI**: Given limited resources, enterprises typically allocate resources using the Horizon 1-2-3 model, followed by a 70-20-10 model and related Opportunity Analysis. • Horizon 1 (Core): 70% • Horizon 2 (Adjacent): 20% • Horizon 3 (Transformational): 10%	**GRC ROI** = (Total Benefits – Total Costs) / Total Costs × 100% Enterprises typically measure ROI through a GRC maturity model. GRC programs are now embracing AI governance and moving from compliance to competitive advantage measurements.	**Ethical AI ROI** = (Direct Financial Value + Indirect Value + Strategic Value) ÷ Total Investment × 100. Where: **Direct Financial Value** = Risk Mitigation + Operational Efficiency + Revenue Impact **Indirect Value** = Trust Impact + Brand Impact + Talent Value **Strategic Value** = Innovation Value + Market Leadership Value
OBJECTIVE AND FOCUS			
Maximizing financial returns from the investment.	Allocate limited resources across growth opportunity horizons. H1: Extend and defend core business through incremental innovations (AI quick hits). H2: Build emerging businesses leveraging existing assets and capabilities (AI for existing). H3: Create viable options for future business opportunities through breakthrough innovation (AI transformation).	Assess whether the GRC investment enhances functionality and delivers business value. Focus on both tangible and intangible benefits: reduced compliance costs, improved operational efficiencies, enhanced risk management, and better decision-making.	Implement responsible and sustainable AI, balancing financial returns with ethical, reputational, and strategic benefits. Emphasize ethical considerations and long-term value creation. Achieving financial, social, and strategic gains while addressing broader ethical considerations.

VALUE COMPONENTS			
Maximize net profit and shareholder value (market capitalization)	H1: AI quick hits on internal business functions for expense reduction H2: AI customer-facing functions and transforming current products and services for revenue growth, differentiation, and competitive advantage H3: AI transformation and disruption of the entire business (entirely new directions), markets, and industries	• Reduced legal costs • Increased efficiency • Reduced risk of fines/penalties • Avoided reputational damage	**Direct Financial Value**: Risk Mitigation + Operational Efficiency + Revenue Impact **Indirect Value**: Trust Impact + Brand Impact + Talent Value **Strategic Value**: Innovation Value + Market Leadership Value
RISK			
Primarily financial risks	H1. Low risk, low reward (single-digit % improvements) H2. Moderate risk, moderate reward (double-digit % improvements) H3. High risk, high reward (triple-digit % improvements)	GRC ROI takes into account risk mitigation, including the potential for reduced fines, penalties, and reputational damage	Includes ethical risks, societal risks, environmental risks, regulatory compliance, and long-term reputational risks

Table 1. Comparison of ROI Frameworks

Gaps in ROI frameworks for AI reveal how traditional ROI models are insufficient for effectively evaluating AI investments, particularly regarding ethics and responsibility. A more comprehensive approach integrating AI ROI, GRC, and ethical AI is needed to consider the following conditions:

- Ethical breaches are often overlooked or undervalued
- Challenges in quantifying intangible benefits
- Overemphasis on short-term gains versus long-term ethical capabilities
- Opportunities for improvement
- Leveraging AI ethics for strategic transformation
- Balance and harmony of short-term and long-term perspectives
- Development of comprehensive, multidimensional models
- Cross-sector collaboration is needed for holistic measurement techniques

ROI of AI ethics considers long-term value creation, risk mitigation, and societal impact, going beyond traditional financial measures to include factors such as trust, reputation, and ethical compliance. By integrating these elements, organizations can develop a better understanding of the true value and risks associated with ethical AI implementation, enabling better-informed decision-making and sustainable growth in the AI–driven business landscape.

03

ROI Calculation Comparison

While similarities and differences exist in calculating value for traditional ROI, AI ROI, GRC ROI, and ROI of ethical AI, ROI of ethical AI requires more robust and nuanced methods:

Calculation	Traditional ROI	AI ROI	GRC ROI	ROI of Ethical AI
Measurement Complexity	Direct financial returns	Tangible and intangible benefits	Risk reduction, compliance improvements, governance effectiveness	Ethical value metrics (fairness, transparency, societal impact)
Cost Structures	Linear investment costs	High initial investment in technology, data infrastructure, and talent	Governance, risk management, and compliance program costs	Ethical compliance costs (bias mitigation, auditing, privacy protection)
Value Calculation	Monetary gains	Efficiency, revenue growth, competitive advantage, innovation potential	Risk mitigation savings, reduced penalties, improved decision-making	Reduced discrimination, enhanced trust, legal/ reputational risk mitigation
Implementation Risk	Operational risks	Technical challenges, data quality issues, integration complexities	Inadequate governance, ineffective risk management, compliance failures	Algorithmic bias, privacy violations, unintended societal consequences
Temporal Perspective	Shorter investment cycles	Medium to long-term perspective	Ongoing assessments and adjustments	Long-term ethical sustainability, continuous monitoring

Table 2. Comparison of ROI Calculation Formulas

The ROI of ethical AI, requiring a holistic approach, seeks to balance short-term financial gains with long-term ethical considerations and reputational benefits. Unique ethical ROI considerations include more robust social elements—quantifying ethical performance, measuring trust and reputation impact, calculating potential avoided penalties, and assessing social and environmental responsibility gains.

04

ROI of AI Ethics: What's Missing in Existing Frameworks and Models

Measuring the return on investment (ROI) for AI ethics initiatives presents unique challenges that existing frameworks struggle to fully address. While models like the Holistic Return on Ethics (HROE) (see figure 3) and Rolls-Royce's Aletheia Framework are emerging, there remain significant gaps in these frameworks in our ability to quantify the full value of ethical AI investments (MAIEI 2024; Institute of Ethics and the Common Good; Rolls-Royce).

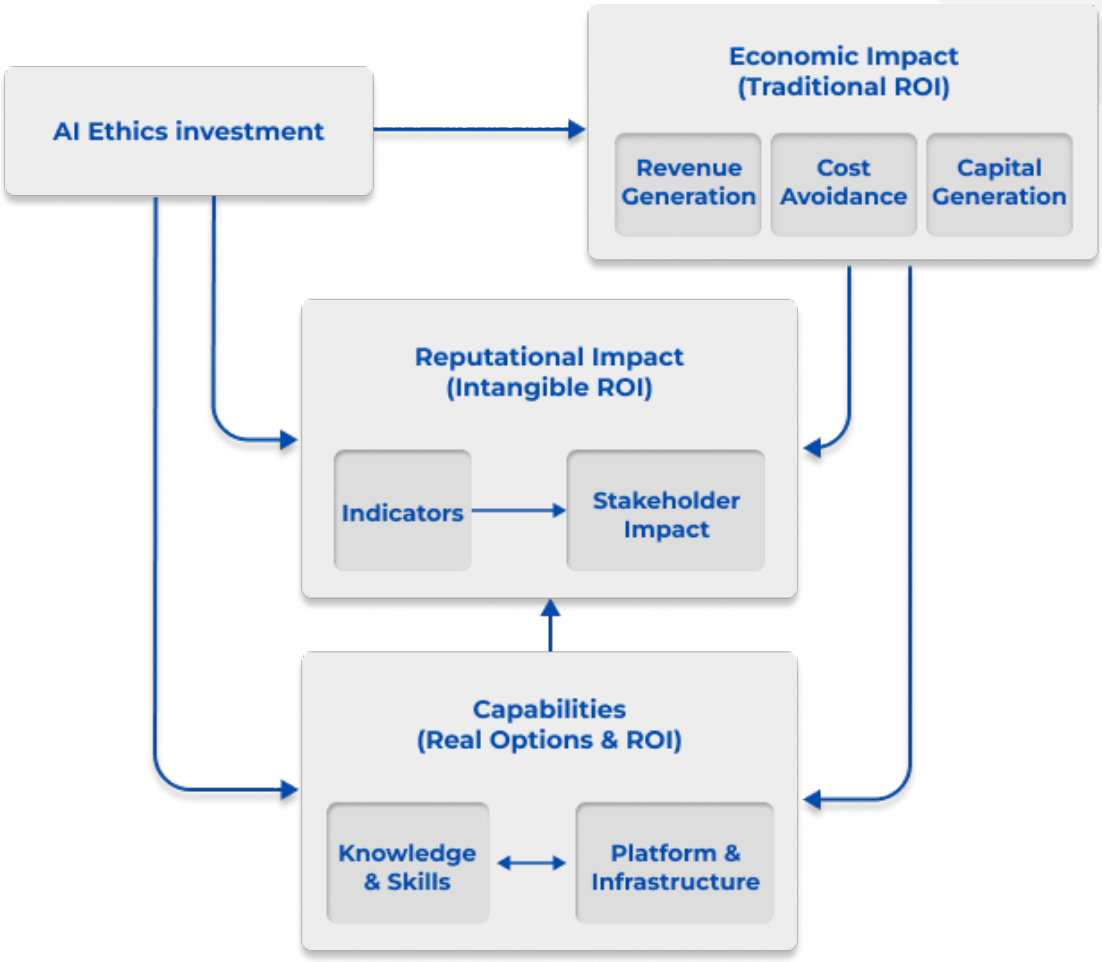

Figure 3. ROI of AI, Holistic Return on Ethics (HROE)

The most critical need is for sophisticated ROI models that can effectively guide ethical decision-making and risk mitigation in the rapidly evolving AI landscape (IBM; Domin et al. 2024). These models must be capable of the following:

- Quantifying intangible benefits like improved stakeholder trust and brand reputation
- Assessing the long-term value of ethical AI capabilities and options
- Identifying potential risks and costs of unethical AI practices
- Balancing financial returns with broader societal and environmental impacts

By addressing these gaps and developing more comprehensive AI ethics ROI frameworks, organizations can make more informed decisions about AI ethics investments, ultimately leading to more responsible and sustainable AI adoption.

05

Proposed Needs in Model for Calculation in ROI of AI Ethics

In the context of AI ethics, an ROI scenario would illustrate several important ethical considerations:

1. **Efficiency Measurement:** While the financial return looks positive, an ethical AI approach would also evaluate the following:

    - Impact on employee workload and job satisfaction
    - Potential workforce displacement
    - Quality of operational changes beyond pure financial metrics

2. **Transparency Considerations:**

    - Were employees consulted about the software implementation?
    - Is the software's decision-making process transparent?
    - Are there potential algorithmic biases in the project management system?

3. **Ethical Investment Analysis:**

    - Beyond monetary return, did the software improve workplace equity?
    - Were there data privacy protections integrated?
    - Did the efficiency gains maintain or enhance human worker dignity?

Key Calculation Considerations:

- Quantify monetary and non-monetary benefits
- Include both tangible and intangible value metrics
- Assess long-term organizational impact
- Measure comprehensive value beyond traditional financial returns

06

Incentivizing AI Ethics, Regulations, Benefits, and Risks of Applied AI Ethics

Governing bodies around the world are grappling with creating effective regulations and incentives for the design and deployment of AI. For example, the EU AI Act, set to be implemented over the next thirty-six months, establishes a comprehensive framework for ethical AI development and deployment. Although no set of regulations is fully formed yet, this landmark legislation transforms theoretical ethical principles into enforceable legal requirements, compelling global tech companies to integrate ethics into their AI strategies.

Core Ethical Principles: The EU Act is built on seven key principles.

1. Human agency and oversight
2. Technical robustness and safety
3. Privacy and data governance
4. Transparency
5. Diversity, nondiscrimination, and fairness
6. Societal and environmental well-being
7. Accountability

Key Ethical Mandates

- Mandatory disclosure of AI systems
- Human oversight for high-risk systems
- Fundamental rights impact assessments for some high-risk AI systems

The act categorizes AI systems based on their potential risks.

- Unacceptable risk: Prohibited (e.g., social scoring, manipulative AI)
- High risk: Subject to strict requirements
- Limited risk: Transparency obligations
- Minimal risk: Unregulated

The EU AI Act's intention is to set initial international ethical AI standards, requiring companies to prioritize responsible AI development. It shifts the AI development approach from technology-driven to ethics-driven, potentially influencing global AI governance. Arguably, these principles, mandates, and evaluations of risk are meant as a call to prioritize the well-being of everyone impacted by these technologies.

Demonstrations are emerging that financial gains can coexist with robust ethical considerations when technology investments prioritize both economic and human-centric values. Leadership for the future with rapid innovation is dependent on the ability of organizations to adapt traditional financial models for long-term benefit.

1. **IBM Research**: Findings indicate that organizations with a strategic approach to AI ethics can achieve an average ROI of approximately 13 percent, compared to 5.9 percent for those without a cohesive strategy (AICadium).

2. **Deloitte Insights**: Their survey reveals that companies with mature AI implementations report an average ROI of 4.3 percent while beginners see about 0.2 percent. Leaders also experience shorter payback periods, averaging 1.2 years (Deloitte).

Careful examination of the benefits and risks regarding applied AI ethics serves to further incentivize. Using a risk calculation model (see table 3 below) along with case studies illustrates the value of implementing AI ethics as an integral to strategic planning and evaluation of success.

Business Imperatives	Risk and Benefit Inquiry	Real-World Examples	ROI Key Performance Indicators
Talent Attraction and Retention	Does this improve productivity or enhance critical thinking? Does this compete with human resources or cause mistrust and dissatisfaction?	The Organization for Economic Co-operation and Development (OECD) revealed the mixed impact of AI on the workplace, including job reorganization, improved engagement and safety, but also increased work intensity and complexity, and the role of worker involvement in AI development to reduce job loss anxiety (Milanes 2023). The Society for Human Resources Management prepared a workplace report that reveals rushed implementation hurts employee engagement and morale (Popera 2024).	Recruitment and training costs averted or incurred. Employer brand sentiment. Turnover/attrition combined with exit interviews. Job application growth.
Brand and Customer Trust	Does this align with our brand values and customer expectations? Is there a possibility this will dilute, rather than strengthen, our reputation or credibility? How will this open new business opportunities?	IBM has built a strong reputation for ethical AI governance through a structured framework that ensures transparency, accountability, and responsible AI deployment (Montgomery and Rossi 2023). By proactively addressing AI ethics with dedicated oversight teams, IBM has strengthened customer trust, aligned AI initiatives with brand values, and opened new business opportunities. The IBM Case Study has served as a reference worldwide (WEF 2021). Microsoft faced criticism for promoting itself as a leader in climate innovation while simultaneously providing AI services to fossil fuel companies to enhance oil and gas production (Hao 2024). This contradiction between the company's public environmental commitments and its business practices led to allegations of hypocrisy, potentially undermining customer trust and damaging its brand reputation. Fashion retailer Mango faced significant backlash after introducing AI–generated models in its advertising campaigns (Arrigo 2024). Critics argued that using virtual models misrepresented products and threatened jobs in the modeling industry, leading to debates over the ethics and transparency of AI in fashion marketing.	Market Share Growth. Customer sentiment and feedback (e.g., Net Promoter Score, support escalations). PR and media sentiment analysis (e.g., before and after rollout). Market adoption rate metrics (e.g., TTA, MAU, DAU, Churn).
Safety and Operations	Does this introduce new safety risks, or is it mitigating current ones? What are the best and worst-case success & failure scenarios? Are we establishing human oversight, fail-safes, and overrides? Have we assessed cybersecurity vulnerabilities, such as AI model hacking or data poisoning?	Two fatal crashes involving Boeing's 737 MAX aircraft resulted in the loss of 346 lives (Dolfing 2024). Investigations revealed that the Maneuvering Characteristics Augmentation System (MCAS), designed to enhance aircraft handling, received erroneous data from a single angle-of-attack sensor, leading to uncommanded, nose-down movements that pilots struggled to counteract. This highlighted critical flaws in the aircraft's design and certification processes. In addition to the tragic loss of life, Boeing grounded its entire 737 MAX fleet, resulting in a loss of $20 billion. Siemens (2024) has implemented AI–driven solutions to enhance the efficiency and reliability of power grids. By integrating smart meters, sensors, and advanced analytics, their systems can predict and prevent potential overloads, effectively balancing supply and demand in real time. Microsoft's AI chatbot (Tay) was manipulated through coordinated user interactions on Twitter, leading it to generate offensive content (Mitre Atlas 2016). This incident highlighted the vulnerability of AI systems to malicious input data.	Safety incident rates (e.g., before and after). Adversarial robustness, time to detect, and respond to threats (e.g., pen testing, MTTD, and MTTR). Employee injury rates (e.g., recordables and work comp). Productivity and efficiency gains/losses. Regulatory incidents, including costs to respond to investigations and/or fines. Litigation volumes and expenses, including the cost of insurance for risk.

Sustainability & Compliance	Are there positive or negative environmental impacts? Are there regulatory or compliance considerations? What are the costs associated with technology and product lifecycles?	AI–driven systems are optimizing energy consumption in commercial buildings. For instance, 45 Broadway in Manhattan implemented BrainBox AI technology, resulting in a 15.8 percent reduction in HVAC–related energy usage (Chow 2024). This system analyzes factors like temperature, humidity, and occupancy to make real-time adjustments, enhancing energy efficiency. In December 2024, Italy's privacy watchdog, the Garante, imposed a €15 million fine on OpenAI for violations of the General Data Protection Regulation (GDPR) (Pollina and Armelleni 2024). The investigation revealed that OpenAI processed users' personal data to train ChatGPT without a proper legal basis and failed to comply with transparency obligations. OECD (2024) published a policy paper on measuring the environmental impacts of artificial intelligence computing and applications.	Data center efficiency scores (e.g., PUE). Regulatory compliance scores (e.g., EU CSRD, SEC ESG reporting). Carbon Intensity per AI Model Training score. Supplier sustainability compliance (e.g., ISO 14001). Recycled material usage percentage.

Table 3. ROI of AI Ethics Table: Benefits and Risks of Ethical AI

6.1 Case Studies Illustrating the Cost of Failures in Applied AI Ethics Assessments

The recent case of Klarna's AI job elimination claim, demonstrates the cost of AI replacing seven hundred jobs highlights the ethical concern of AI–driven job losses, including transparency and accountability, long-term consequences prompting consideration of broader ethical questions about the role of AI in society and the organization's behavioral impacts on the future of work, and the responsibilities of companies in ensuring a stable and equitable job market (Crumley 2025). This case echoes the financial and reputational losses paid by AI–driven automation at Deutsche Bank in 2019, when large-scale layoffs in exchange for heavily automating certain financial services functions with AI failed resulting in $8.4 billion in restructuring costs due to the need for severance packages, hiring retraining consultants, and associated legal costs.

Many cautionary tales seem to go unheeded, as in the Wells Fargo Fake Account Scandal (2016). While not purely AI–driven, the Wells Fargo case underscores how automated systems—without proper oversight—can cause massive fraud and accountability issues. The bank faced $3 billion in fines for opening fake accounts to meet sales targets. With AI increasingly managing customer interactions and transactions, a lack of accountability and human oversight in decision-making could lead to similar or worse outcomes.

The IBM Watson for Oncology case study also illustrates how failing to address ethical challenges in AI development can unintentionally transform a promising innovation into a financial and reputational liability. With an initial investment of $62 million, the project aimed to assist oncologists in recommending cancer treatments but faced significant ethical and practical challenges. Key issues included bias in training data, which was skewed toward Western patient demographics, and an overreliance on AI that overshadowed the importance of human clinical judgment. This limitation resulted in treatment recommendations that were less effective for diverse populations, ultimately undermining the tool's clinical utility.

These ethical lapses led to minimal tangible financial returns and a significant gap between development costs and clinical outcomes, resulting in an estimated net loss of $50–60 million. The case highlights that true ROI in AI must encompass not only financial returns but also social responsibility, patient safety, and equitable health-care outcomes. It emphasizes the need for addressing bias during development, fostering human–AI collaboration, and embedding ongoing ethical assessments throughout the AI life cycle. This example demonstrates how neglecting ethical factors can turn a high-profile technological investment into a cautionary tale, directly influencing both financial and reputational outcomes.

Companies and organizations, like Anthropic, warned, "The incentives in the AI industry—think profit and prestige—will push companies to "deploy large generative models despite high uncertainty about the full extent of what these models are capable of" (Samuel 2024). AI ethics advocates argue that ensuring safe AI development requires a fundamental shift in the industry's incentive structure rather than a reactive approach that waits for catastrophic failures before taking action. This perspective emphasizes the need for proactive measures to align AI development with safety considerations, instead of relying on post-hoc responses to crises.

The daily emergence of damage to users resulting from lack of robust AI ethics review, such as cases with dire outcomes with chatbot-human relationships, deepfakes, security breaches, environmental consequences of Gen AI systems and weaponized AI systems serves as further incentives (Rissman 2024; Damiani 2019; White 2024; Ren and Wierman 2024; Dresp-Langley 2023). Restructuring corporate incentives to promote ethical behavior necessitates a thorough analysis of the underlying factors driving unethical practices, as well as the identification of effective motivators that can foster a stronger commitment to moral decision-making. This approach requires the following:

- Examining the root causes and motivations behind unethical decision-making
- Assessing the current incentive structures that may inadvertently encourage questionable practices
- Developing and implementing new incentive systems that reward ethical behavior and long-term sustainability
- Creating an organizational culture that values and prioritizes long-term gains of responsible design and deployment over short-term gains

By addressing these elements, companies can align their economic interests with ethical considerations, ultimately leading to more responsible and sustainable business practices. Bottom line: ethical AI isn't a cost—it's a sophisticated financial risk management and revenue generation strategy with measurable, substantial economic returns. For example, assigning a 10 percent revenue impact for a company with $10 million annual revenue if an ethics breach occurs. Avoiding this saves $1 million.

07

Suggested Key Features of Ethics Return Engine (ERE) Not Included in HROE

1. Comprehensive Input Categories

    - Financial Metrics
    - Risk Metrics (e.g., COSA—Risk Tolerance?)
    - Performance Metrics

2. Calculation Methodology

    - Weighted risk mitigation scoring
    - Potential savings calculation
    - Performance boost evaluation
    - ROI percentage computation

3. Dynamic Inputs

    - Numerical inputs for precise calculations
    - Ranges from zero to one hundred for risk/performance metrics
    - Real-time calculation updates

Recommended Enhancements:

- Add tooltips explaining each metric
- Create export/report functionality
- Implement data persistence
- Framework for calculation and assessment steps
- Develop visualization of ROI trends
- Example of Ethics Return Engine coming in the next paper with test studies.

08

Call-to-Action: Recommendations

In this constantly changing frontier of innovation with AI, old ways of operating are no longer adequate to measure and evaluate failure and success. This transformative era calls for human and machine innovation in-partnership. Leaders in this new frontier are being provided an opportunity to be at the forefront of transformation that can serve humanity beyond anything seen before. The possibilities are endless as long as more people take the lead, incorporating goodwill and responsibility as necessary to long-term success. These technologies demonstrate more and more the interconnectedness of our actions. This paper serves as a call to action for leaders to recognize the power of goodwill for current and future generations.

> *We're all about to get on this brand-new airplane that has never been tested before. It's going to take off and it's never going to land. It has to fly forever and not crash, because the whole human race is in that airplane. We need to make sure everyone has done their job before we get into that plane.*
>
> *(**Stuart Russell**, Professor of Computer Science and Chair in Engineering, and Founder of the Center for Human-Compatible Artificial Intelligence [CHAI] at UC Berkeley, Professor of Neurological Surgery at the University of California, San Francisco [UCSF])*

- Transformative goal setting with AI ethics: Establish incentives and motivation for implementation
- Identify baseline
- Include Ethics Return Engine: Innovating measurement systems
- Suggested strategy and cycle for implementation

Appendix

Table 4. Comparison of ROI Frameworks

(Full Table)

TRADITIONAL ROI	AI ROI	GRC ROI	ETHICAL AI ROI
FORMULA			
ROI = Net Profit / Total Investment × 100 **Net Profit** = Total Revenue – Total Expenses	**AI ROI**: Given limited resources, enterprises typically allocate resources using the Horizon 1-2-3 model, followed by a 70-20-10 model and related Opportunity Analysis. • Horizon 1 (Core): 70% • Horizon 2 (Adjacent): 20% • Horizon 3 (Transformational): 10%	**GRC ROI** = (Total Benefits - Total Costs) / Total Costs × 100% Enterprises typically measure ROI through a GRC maturity model. GRC programs are now embracing AI Governance and moving from compliance to competitive advantage measurements.	**Ethical AI ROI** = (Direct Financial Value + Indirect Value + Strategic Value) ÷ Total Investment × 100. Where: **Direct Financial Value** = Risk Mitigation + Operational Efficiency + Revenue Impact **Indirect Value** = Trust Impact + Brand Impact + Talent Value **Strategic Value** = Innovation Value + Market Leadership Value
OBJECTIVE AND FOCUS			
Maximizing financial returns from the investment	Allocate limited resources across growth opportunity horizons. H1: Extend and defend core business through incremental innovations (AI quick hits) H2: Build emerging businesses leveraging existing assets and capabilities (AI for existing) H3: Create viable options for future business opportunities through breakthrough innovation (AI transformation)	Assess whether the GRC investment enhances functionality and delivers business value. Focus on both tangible and intangible benefits: reduced compliance costs, improved operational efficiencies, enhanced risk management, and better decision-making.	Implement responsible and sustainable AI, balancing financial returns with ethical, reputational, and strategic benefits. Emphasize ethical considerations and long-term value creation. Achieving financial, social, and strategic gains while addressing broader ethical considerations.

TIME HORIZON			
Short-term pressured by quarterly earnings and annual forecasts	Weighted toward short- to medium-term	Short- to medium-term for risk and compliance and longer-term for broader governance foundations	Immediate action is needed to avoid irreversible damage and risks while a foundation for medium to long-term
STAKEHOLDERS			
Primarily, shareholders and investors	H1. Existing customers, current market segments H2. New customer segments, potential partners H3. Future markets, emerging technologies, long-term investors	GRC ROI addresses multiple stakeholders, including compliance teams, risk managers, executives, and board members	Shareholders, employees, customers, regulators, and broader society
VALUE COMPONENTS			
Maximize net profit and shareholder value (market capitalization)	H1: AI quick hits on internal business functions for expense reduction H2: AI customer-facing functions and transforming current products and services for revenue growth, differentiation, and competitive advantage H3: AI transformation and disruption of the entire business (entirely new directions), markets, and industries	• Reduced legal costs • Increased efficiency • Reduced risk of fines/penalties • Avoided reputational damage	Direct Financial Value: Risk Mitigation + Operational Efficiency + Revenue Impact Indirect Value: Trust Impact + Brand Impact + Talent Value Strategic Value: Innovation Value + Market Leadership Value
RISK			
Primarily financial risks	H1. Low risk, low reward (single-digit % improvements) H2. Moderate risk, moderate reward (double-digit % improvements) H3. High risk, high reward (triple-digit % improvements)	GRC ROI takes into account risk mitigation, including the potential for reduced fines, penalties, and reputational damage	Includes ethical risks, societal risks, environmental risks, regulatory compliance, and long-term reputational risks

MEASUREMENT OF SUCCESS			
Profitability and cost efficiency	H1. Profitability, market share, customer retention H2.New revenue streams, successful pilot programs, strategic partnerships H3. Long-term growth potential, disruptive innovations, market positioning	Success is measured through the following: • Reduced compliance costs • Improved operational efficiencies • Enhanced risk management capabilities • Better decision-making processes	Multidimensional success: • Profitability, trust, brand reputation, safety, innovation, and societal impact • Ethical compliance, stakeholder trust, innovation capabilities
RELEVANCE IN AI PROJECTS			
Suitable for projects with clear financial outcomes	H1. Implementing AI for process optimization and customer service improvements H2. Developing AI–driven products or services for adjacent markets H3. Exploring cutting-edge AI technologies for potential industry disruption	GRC ROI principles can be applied to AI projects, particularly in areas of risk management and compliance related to AI implementation. GRC functions are starting to incorporate AI governance platforms into their programs.	Essential for AI projects where ethical considerations, trust, and innovation are critical (individual and collective safety).
POTENTIAL PITFALLS			
Overlooks nonfinancial risks and long-term impacts	• Overemphasis on Horizon 1, neglecting future growth opportunities • Lack of balance across horizons, risking long-term sustainability • Misalignment between innovation efforts and overall business strategy • Failure to adapt the model to industry-specific timelines and market dynamics	• Overlooking hidden costs such as training and maintenance • Failing to account for intangible benefits • Not considering the full scope of risk mitigation	It can be complex to calculate and requires robust metrics for nonfinancial values Difficulty in quantifying intangible benefits, long-term focus may conflict with short-term goals

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About

The Digital Economist, based out of Washington D.C. is an ecosystem of 40,000+ executives and senior leaders dedicated to creating the future we want to see: where digital technologies serve humanity and life. We work closely with governments and multi-stakeholder organizations to change the game: how we create and measure value. With a clear focus on high-impact projects, we serve as partners of key global players in co-building the future through scientific research, strategic advisory and venture build out. We are industry-agnostic as most high-impact projects touch many different industries. Our portfolio ranges from energy transition to ethics in emerging technology.

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