



AI
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EU AI Act

*AI for Value: Framework for
Trustworthy AI Adoption*

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Our framework captures recommended trustworthy AI practices, offering an iterative approach to AI implementation and a robust methodology to map AI initiatives value goals along the varying degrees of adoption. These offered best practices that can assist AI adoption regardless of industry and encourages enterprises at all stages of readiness to deploy AI for impact in a way that fits their current understanding of the technology, especially with the EU AI Act’s imminent entry into force. We show how enterprises can seize the initiative by implementing trustworthy AI programmes across the organisation, aligning people, process and technology with the EU AI Act’s stringent demands.

About this report

This report is based on market research, publicly available data, and interviews with AI specialists in AI & Partners, financial services organisations, and relevant third-parties. Moreover, quotations provided on specific topics reflect those of AI specialists at AI & Partners to be as representative as possible of real-world conditions. All references to EU AI Act reflect the version of text valid as at 13 June 2024. Accessible [here](#).

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Foreword

In today's world, enterprises of all sizes, nature, scale, and complexity find themselves at an inflection point – one that requires them to prioritize all stakeholders at the centre of their business model. The disruptive landscape of ongoing global crises means that business as usual is no longer an option. In this living scenario of change and challenge, technology innovators are demonstrating globally, across sectors and regions, what the business environment of the future looks like – a model where, inter alia, sustainability and environmental protection coexist with – and reinforce - value creation objectives.

To materialise value on a grand scale, widespread AI awareness and the strategic, trustworthy deployment of the technology is required – whether integrated into operating models or as a product deployed as a means to operationalise change. Notwithstanding, internal and external barriers remain that prevent technology innovators from adopting AI at scale, hindering their ability to harness its full potential.

For technology innovators, challenges such as regulatory hurdles, skills gaps, access to AI technology along with balancing stakeholder pressures and business objectives can be restrictive to their understanding and deployment of the technology. Conversely, technology organizations and developers have a duty to develop AI capabilities that are ethical, transparent and fair, address global disparities and refrain from exacerbating current biases. This brings about the creation of two-way communication between technology organizations and wider AI ecosystem actors (e.g. regulators) that embeds the concerns of technology innovators, permitting them to influence the product roadmap and guaranteeing that AI capabilities are suitable for value-creating enterprises.

This paper utilises the regulatory pillars of the upcoming European Union (“EU”) artificial intelligence (“AI”) Act (the “EU AI Act”), together with existing AI governance structures, to showcase a strategic roadmap for technology innovators assessing how to include AI in their operations or models in compliance with EU AI Act.

This paper can form the basis enterprises' work with intermediary partners, stakeholders, clients and other ecosystem collaborators on the further development of training and skill-building toolkits for value creation. Our hope is that the frameworks and roadmaps presented herein, along with relevant external resources made publicly available by corporate collaborators, can help technology innovators achieve the promise of AI-driven value creation.



Executive Summary

Our framework allows enterprises to adopt AI for value under the EU AI Act and showcases technology, regulatory, and operational challenges for trustworthy implementation.

The rapid development and uptake of artificial AI capabilities presents a viable solution for technology innovators to overtake structural gaps and scale their solutions.

Building on an array of publicly available data and research, this paper introduces the AI for Value Framework to guide technology innovators and other organizations through the complex landscape of AI integration under the EU AI Act. The framework encourages enterprises to begin with low-risk, low-cost AI applications and stresses the importance of EU AI Act readiness over mere technological capability. It advocates an iterative but strategically aligned approach with specific evaluation gates for the implementation of AI under EU AI Act.

The Framework outlines three layers of AI implementation: influence on vision and goals; implementation roadmap; and skills and threats management. Each layer addresses different elements of EU AI Act readiness and potential applications, from vanilla, internal use cases to complex, client-facing deployments. The modular approach allows enterprises to customise their AI strategies to their specific needs and capacities, ensuring that AI adoption is both impactful and value-added.

The framework also highlights risks and technological, operational, and regulatory shortcomings that need to be addressed for a trustworthy implementation. This includes, for example, data biases or technology structures that are not fit to allow for explainability of AI decisions under Article 52c – a key element to build trust among the stakeholders that technology innovators are trying to serve.

Therefore, the paper calls for active engagement between AI for technology innovation ecosystem, technology leaders and technology innovators to jointly enable the trustworthy adoption of AI for positive value-added.



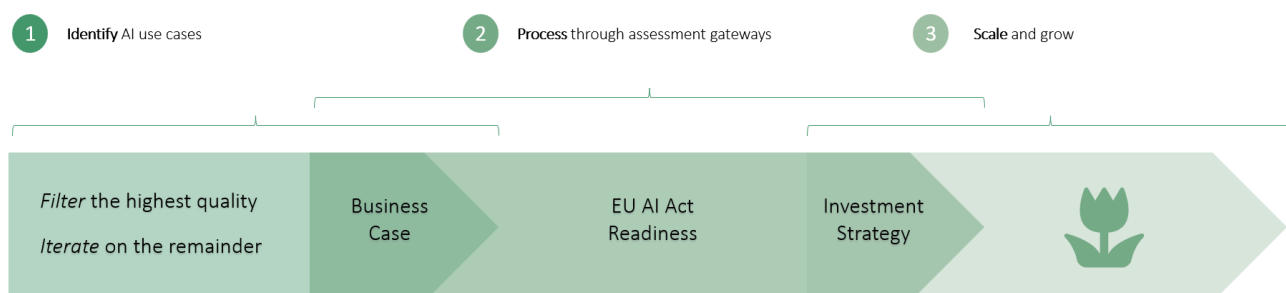
2. Pathways for Adoption: the Framework

Inspired by current concepts, the Framework guides the trustworthy adoption of AI for value

Publicly available data suggests encourages technology innovators to start small and execute low-cost/low-risk implementation when first approaching AI use cases. It stresses that social innovators and conventional companies alike need to consider their EU AI Act readiness when designing AI implementation, as internal preparedness often outweighs technological and data considerations. The framework highlights adoption pathways based on EU AI Act readiness and relevant capabilities and risks linked to these pathways.

The framework aligns with other concepts like the Presidio Framework by the World Economic Forum’s (“WEF”) AI Governance Alliance, which supports organizations in responsibly enhancing productivity and redefining industries through AI. The Framework builds on the Presidio Framework by identifying and filtering the best AI use cases aligned with strategic objectives and funnels them through three common assessment gateways – business impact, EU AI Act readiness and investment strategy. These assessment gateways are designed to be applied in any sequence and iteratively.

Figure 3: The Framework: Processing AI use cases through assessment gateways

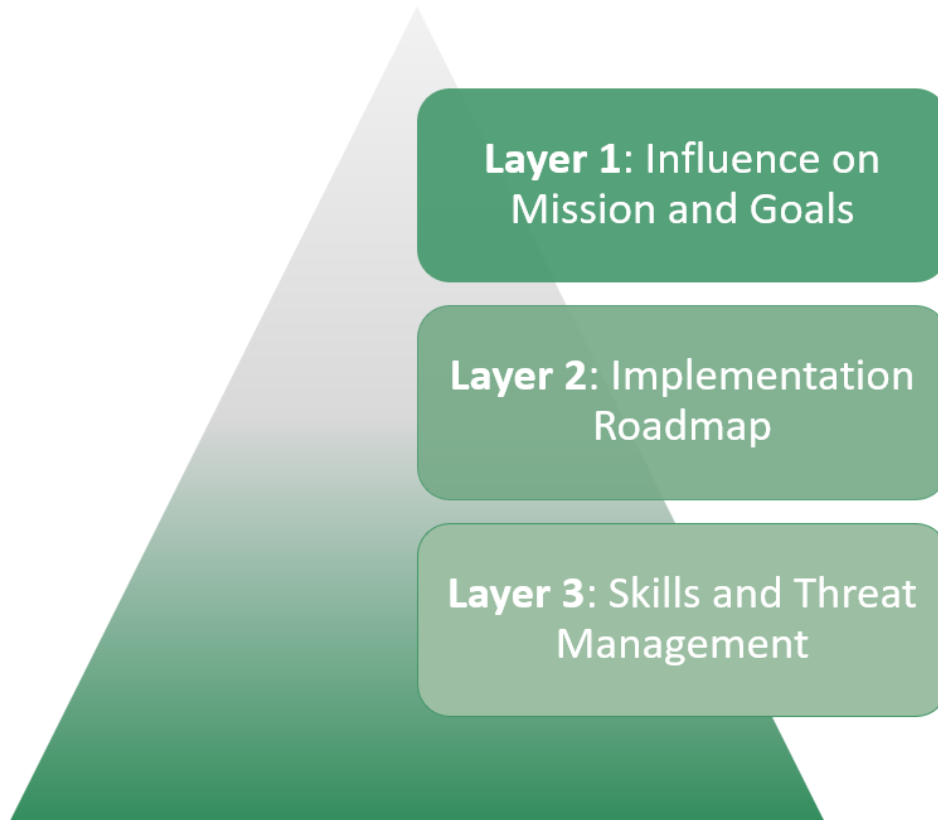


2.1 The Framework

The Framework builds on the Presidio framework. It highlights how different adoption pathways are interlinked with different levels of EU AI Act, technological and data readiness. It also emphasizes the requirement for alignment with an enterprise’s impact ambition at every stage. It highlights that technology innovators are, by nature, value-creating organizations and their consideration of strategic alignment goes beyond business alignment. Their considerations prioritize value and also include core values, trustworthy practices and ethical principles when applying AI (such as prioritizing broad stakeholder participation in the design, development and deployment of AI solutions).

That may not always be an extensive, highly designed and resource-intensive strategy process but rather an ongoing validation of prospective use cases with value objectives (e.g. early engagement of stakeholders in AI product/service development, data ownership among beneficiaries or the prohibition of decision-making without human involvement).

Figure 3: The Framework



Influence on Vision and Goals

This layer focuses on how actions and decisions align with and impact the overarching mission and strategic objectives of an organization.

Implementation Roadmap

This layer outlines the step-by-step process and milestones for adopting new initiatives, technologies, or changes within the organization.

Skills and Threats Management

This layer addresses the necessary capabilities and competencies required to achieve goals while also identifying and mitigating potential risks and challenges.

The second layer indicates the different adoption pathways. Innovators may choose different pathways depending on their EU AI Act readiness for AI, which will evolve over time. It showcases different approaches to AI implementation depending on the firm's maturity, starting with low investment and low risk implementation.

When implementing AI across the adoption pathways, different capabilities and skills are considered with varying rigour. This is described in the third layer of the framework:

2.1.1. Ethics

Beyond the consideration of general values, principles and the impact mission in layer 1, this capability and risk consideration considers elements such as considering bias in AI models, ensuring transparency of decision-making, accountability for the decisions made and integrating trustworthy AI as a business principle into the firm at a later stage of the enterprise deployment. This aligns with **Recital 7** which states that high-risk AI systems should also take into account the European Declaration on Digital Rights and Principles for the Digital Decade and the Ethics guidelines for trustworthy AI of the High-Level Expert Group on Artificial Intelligence (AI HLEG).

2.1.2. Data

Data strategies may be applied in different stages during the implementation of AI, including an analysis of existing data assets, the cleaning and preparation of data, managing data intake as well as data privacy considerations when using data – especially in highly sensitive impact areas such as healthcare. This aligns with **Article 10 (Data and data governance)** which states that high-risk AI systems which make use of techniques involving the training of AI models with data shall be developed on the basis of training, validation and testing high-quality data sets.

2.1.3. Business and organization

EU AI Act readiness is a key component of implementing AI. This may include setting a clear vision and leadership for the use of AI (especially when utilising AI as a core asset or transforming the enterprise to an AI-first enterprise), an ongoing learning strategy, the development of skills and talent as well as change management and the development of an AI or data culture. For technology innovators, stakeholder management is particularly important to create the necessary buy-in and trust among key constituents. This aligns with **Article 4 (AI literacy)** which states that providers and deployers of AI systems shall take measures to ensure, to their best extent, a sufficient level of AI literacy of their staff.

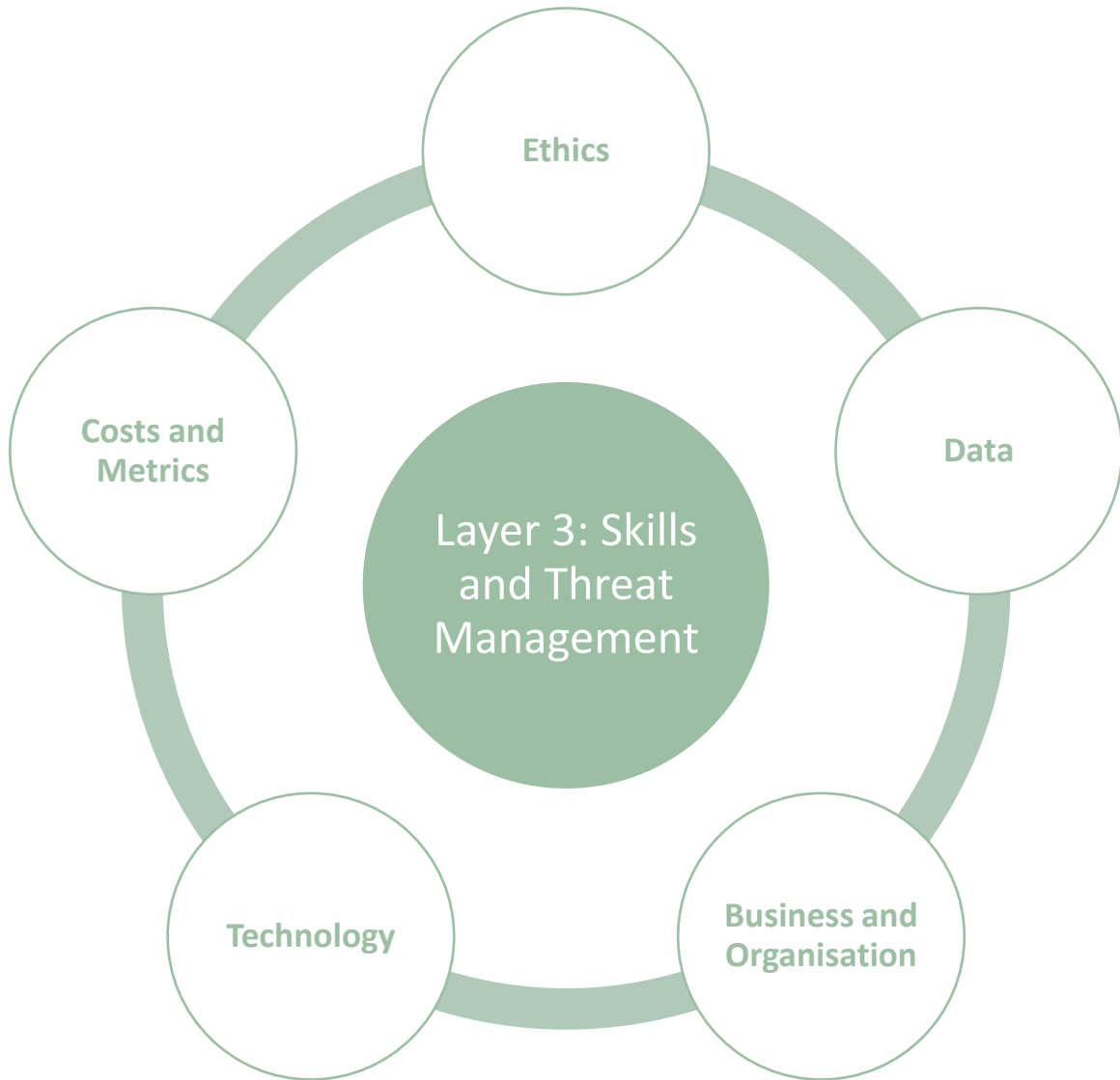
2.1.4. Technology

Many technology innovators struggle with the identification of the right tech stack for their use cases. In early adoption cases, technology innovators may simply apply off-the-shelf solutions with low implementation complexity and costs. Later on, model complexity, the need for reinforcement training (particularly for use cases with the need for contextual data), interoperability with ecosystem actors or internet access issues may arise as well.

2.1.5. Costs and metrics

Given the wide availability of AI technology, costs are not much of an issue in early stages of AI adoption. The number of requests with an application programming interface (“API”) appears to be low, data volumes tend to be constrained and EU AI Act readiness may not need to be considered. But in latter-stage implementations, variable costs quickly scale up and indirect expenses mount to ensure that AI implementations remain value-added and trustworthy. Technology innovators may need to consider and monitor costs that are not limited to software or licensing fees but also include compliance costs, data preparation or hardware costs.

Figure 3: Layer 3 capabilities required for implementation roadmap



The following section explores the abovementioned capabilities and risks in more detail. The Framework offers a modular approach to considering the implementation of AI for value. On one end of the spectrum, technology innovators with strong EU AI Act readiness – solid AI literacy and compliance capabilities, a robust enterprise-wide attitude to the technology and a clear articulation and understanding of their data assets and trustworthy concerns – may apply capabilities and manage risks across the entirety of the framework. Enterprises that have not built such internal capabilities may utilise the technology to experiment and therefore use a low-risk entrance point to implement the technology at low cost and with minimal impact on the business strategic goals and trustworthy concerns.



3. Skills and Threat Management

Different parts of implementation roadmap necessitate different skills and threat management capabilities

The five capabilities and risks outlined in the PRISM framework outline potential considerations for social innovators. Table 2 and the interactive assessment complementing this paper allow organizations to evaluate which of these capabilities and risks are relevant for them, based on their adoption pathways and use case.

Table 1: Skills and Threat Management by Implementation Roadmap

Capability	Details	Implementation Roadmap					
		Assessment and Planning	Design and Development	Approval and Buy-in	Implementation and Integration	Evaluation and Optimisation	Sustainability and Scaling
Skills Assessment	Identify the skills and competencies required for the new initiative.	Relevant	Relevant	Relevant	Not applicable	Not applicable	Not applicable
Training and Development	Create a comprehensive training program to upskill employees.	Not applicable	Relevant	Not applicable	Relevant	Relevant	Relevant
Risk Identification and Analysis	Identify potential risks associated with the initiative.	Relevant	Relevant	Relevant	Not applicable	Not applicable	Not applicable
Mitigation Strategies	Develop strategies to mitigate identified risks.	Not applicable	Not applicable	Not applicable	Relevant	Relevant	Relevant
Monitoring and Review	Continuously monitor for new and evolving risks.	Not applicable	Not applicable	Not applicable	Relevant	Relevant	Relevant

 Skill or threat not applicable for this part of implementation roadmap
 Relevant skill or threat for this part of implementation roadmap

2.1 Skills Assessment

In the context of trustworthy AI adoption, skills assessment is crucial to identify the competencies required to develop, deploy, and maintain AI systems that are ethical, transparent, and reliable. This involves evaluating the current skill levels within the organization and identifying gaps in expertise related to AI technologies, data science, ethics, and regulatory compliance. A thorough skills assessment ensures that the organization has the necessary talent to design AI systems that align with ethical standards and industry best practices.

It also highlights areas where additional training or hiring is needed, thereby mitigating the risk of unintentional bias, security vulnerabilities, and compliance issues. Ultimately, a well-conducted skills assessment lays the foundation for a robust and capable team that can navigate the complexities of trustworthy AI.

2. Training and Development

Effective training and development programs are essential for fostering the skills needed to adopt and maintain trustworthy AI. These programs should encompass technical skills in AI and machine learning, as well as knowledge in ethics, data privacy, and regulatory standards. Training ensures that all stakeholders, from developers to decision-makers, understand the importance of designing AI systems that are transparent, fair, and accountable. Ongoing development opportunities help keep the team updated with the latest advancements and best practices in AI ethics and governance. By investing in comprehensive training, organizations can build a culture of continuous learning and ethical awareness, which is critical for the responsible deployment of AI technologies that users and society can trust.

3. Risk Identification and Analysis

Identifying and analyzing risks is a pivotal component of trustworthy AI adoption. This process involves recognizing potential threats such as algorithmic bias, data privacy breaches, security vulnerabilities, and non-compliance with regulations. By systematically identifying these risks, organizations can proactively address them, ensuring that AI systems are designed and deployed with safeguards in place. Risk analysis helps prioritize the most significant threats and develop strategies to mitigate them, which is essential for maintaining public trust and avoiding legal repercussions. A thorough risk identification and analysis process ensures that AI systems operate within acceptable risk parameters, enhancing their reliability and societal acceptance.

4. Mitigation Strategies

Developing and implementing effective mitigation strategies is essential to address the risks associated with AI adoption. These strategies may include adopting ethical guidelines, conducting regular audits, ensuring transparency in AI decision-making processes, and implementing robust security measures. Mitigation strategies also involve setting up feedback loops and grievance mechanisms for affected stakeholders. By proactively addressing potential risks, organizations can reduce the likelihood of negative outcomes such as biased decision-making, data breaches, and regulatory penalties. Well-crafted mitigation strategies not only protect the organization but also build trust with users, regulators, and the public by demonstrating a commitment to ethical and responsible AI practices.

5. Monitoring and Review

Continuous monitoring and review are critical for maintaining the trustworthiness of AI systems. This involves regularly evaluating the performance and impact of AI applications to ensure they meet ethical standards and regulatory requirements. Monitoring helps detect any deviations or unintended consequences early, allowing for timely interventions. Regular reviews and audits ensure that AI systems remain aligned with organizational values and societal expectations over time. By implementing robust monitoring and review processes, organizations can adapt to evolving risks and continuously improve their AI systems. This ongoing vigilance is essential for sustaining trust in AI technologies and ensuring they contribute positively to society.

4. Conclusion

Technology innovators are spearheading the AI revolution, applying it in sectors such as healthcare, education, finance, and law to significantly boost their impact on complex business challenges. Their approach, as outlined in the Framework, sets a standard for trustworthy AI integration across sectors, emphasizing the balance between EU AI Act readiness, ethical considerations and potential benefits.

These pioneers highlight that AI's reach extends beyond commercial uses, significantly enhancing how enterprises tackle global macroeconomic and geopolitical issues when aligned with a clear mission. The Framework captures these practices, offering an iterative approach to AI implementation and a robust methodology to map AI initiatives value goals along the varying degrees of adoption. It offers best practices that can assist AI adoption regardless of industry and encourages enterprises at all stages of readiness to deploy AI for impact in a way that fits their current understanding of the technology.

Technology innovators' progressive use of AI is a model for trustworthy technology use. Looking ahead, incorporating their approaches into AI strategies will be vital to harnessing AI's full potential to benefit enterprises' value-added goals. Technology leaders are encouraged to engage with these innovators to prepare the future roadmap of AI for value-added application, jointly addressing issues such as transparency, explainability or interoperability. This paper touched on accomplishments in AI, addresses gaps and encourages ongoing innovation and collaboration in the



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To find out how we can help you, email contact@ai-and-partners.com or visit <https://www.ai-and-partners.com>.



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