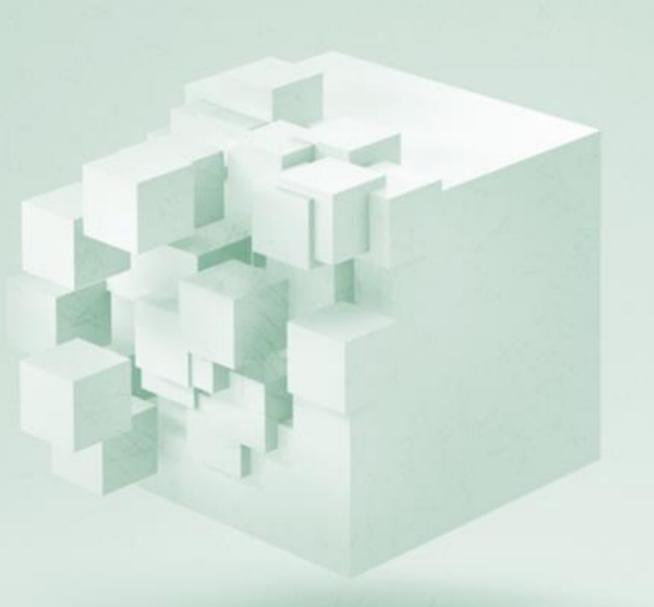
# The European Union Artificial Intelligence Act



**Driving AI Leadership** 

AI C-Suite Toolbox

August 2024



— About



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For more information on this publication, visit https://www.ai-and-partners.com/.

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'Al That You Can Trust' - Your trusted advisor for EU AI Act Compliance. Unlock the full potential of artificial intelligence while ensuring compliance with the EU AI Act by partnering with AI & Partners, a leading professional services firm. We specialise in providing comprehensive and tailored software solutions for companies subject to the EU AI Act, guiding them through the intricacies of regulatory requirements and enabling responsible and accountable AI practices. At AI & Partners, we understand the challenges and opportunities that the EU AI Act presents for organisations leveraging AI technologies. Our team of seasoned experts combines in-depth knowledge of AI systems, regulatory frameworks, and industry specific requirements to deliver strategic guidance and practical solutions that align with your business objectives.

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This report aims provides a practical set of tools that can help corporate executives understand the EU AI Act's potential impact on their roles, ask the right questions, understand the key trade-offs and make informed decisions on AI projects and implementations. This report adapts similar guidelines produced by the WEF.

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<sup>\*</sup>Split into two sections: (A) **EU AI Act Preparedness Assessment Tool**: This tool can be used by individual executives or as a cooperative C-suite exercise to assess the internal understanding of sustainability's potential impact on their organization as well as their organization's ability to address any inherent implications; and (b) **Guidance Tool**: This tool is useful after the Preparedness Assessment Tool. The suggestions below serve as starting points to brainstorm responses to fill any potential gaps that may have surfaced from the initial exercise.

## — A holistic, multifaceted approach to trustworthy AI is necessary



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Any technology that has the potential to meaningfully optimise businesses and society raises important challenges for enterprises to adopt, but also potentially new risks that can prove challenging to foresee and manage. New strategic possibilities, processes, practices, skills, culture and other significant organizational changes required to safely leverage major technological innovations make it vital for C-suite executives to stay close to these technological developments, understand their implications and skilfully lead and manage innovation and adoption while minimizing risks under the [newly entered into force] EU AI Act.

Artificial intelligence ("AI") is arguably one of the historically most impactful technologies for business, the economy and society, considered to be a primary driving factor behind the Digital Decade set out by the European Commission. According to some estimates, it is expected to create a total GDP uplift of about \$15.7 trillion globally by 2030.

Al can enable opportunities and perform tasks unthinkable until recently, such as large-scale visual inspections of physical assets or livestock; medical diagnoses with higher accuracy than the best experts; significant support for the creation of new discoveries and IP, as an example for the development of new drugs; automated conversations with people anytime, anywhere, for example to enable efficient and effective customer service; or full automation of complex tasks, such as autonomous driving.

Conversely, if not managed carefully, it also creates new major risks akin to nothing previously experienced. For instance, as discussed in this toolbox, AI can amplify inequalities and contribute to unfair treatment at scale, create new possibilities for malicious attacks and new unsafe scenarios, or contribute to misinformation and the creation of polarization that can pose threats to democracy and even to national security.

Given the capacity of AI for value creation, disruption and destruction, it is important for executives to better understand "What you have to do and the way you have to do it is incredibly simple. Whether you are willing to do it is another matter." with this technology. This requires a multifaceted approach and holistic understanding of AI, straddling technical, organizational, regulatory, societal and also philosophical aspects, among others. That is the aim of this toolbox: to provide a one-stop place for the C-suite to identify and understand the multiple and complex issues that AI raises for their business and society under the EU AI Act. This is necessary not only for the success and potentially survival of their own enterprises, but also to ensure the trustworthy innovation and deployment of AI systems, taking into account the macro, short-term and long-term impact and potential second-order effects.

This document provides a practical set of tools that can help corporate executives understand the EU AI Act's impact on their roles, ask the right questions, understand the key trade-offs and make informed decisions on AI projects and implementations. This toolbox is targeted towards the C-suite executives who will operationalize the strategy. A practical set of tools can empower them to understand the positive and negative aspects of using AI or machine learning in their businesses and oversee the trustworthy operationalization of AI in their enterprises.

The toolbox is organized according to themes covering the key aspects every C-suite needs to consider in five broad modules:

- 1. Al strategy
- 2. People and organization



- 3. Trustworthy Al
- 4. Implementation of AI
- 5. Annexes



New business model

How will Al

be used?

Operational improvement

Risk: Misalignment with requirements

**Reaction**: Re-evaluate system capabilities

Risk: Maximum, due to untested technology

**Reaction**: Conduct full risk assessments

Risk: Compliance gaps with legacy technology

**Reaction**: Conduct regular audits and updates

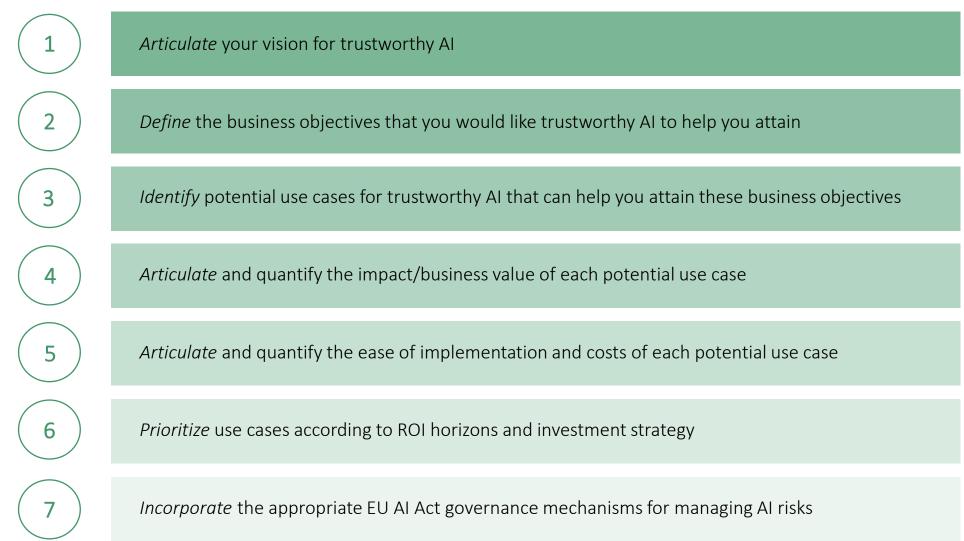
**Risk**: Integration issues & unforeseen impacts

**Reaction**: Implement through phased rollouts

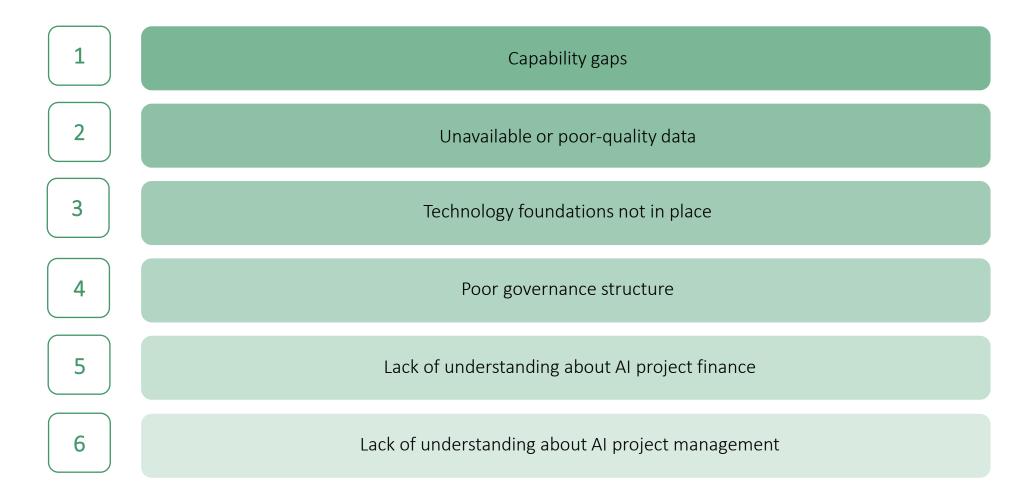
Existing Al System

New Al System

## What type of Al System?





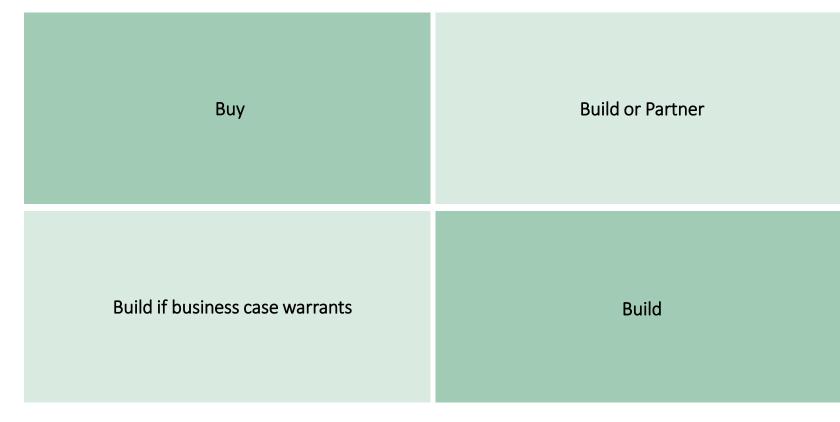






value?

Operational improvement



Weak Strong

# How strong is the enterprise's capabilities?

— What trustworthy AI is and is not

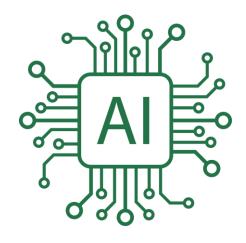


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- Doing good work that produces good and trustworthy AI
- Maximizing benefits and eliminating or minimizing harms
- Fairly distributing benefits and burdens
- Understanding the impact and implication of AI systems
- Challenging the status quo and checking the exercise of power
- Bringing and including diverse perspectives
- Navigating dilemmas and trade-offs



## What the trustworthiness of AI is not

- Only compliance
- A set of fixed rules to follow
- A purely negative frame, more than risks
- A one-off event ("set it and forget it")
- A technical "bugfix"



## **Ethics Board**

# Projects Team - Creators & Executors (1st Line)

#### Model Development & Data Use

Model developers or owners must follow appropriate standards for data preparation, model development, testing, bias checks and maintenance. Use cases must be aligned with overall organizational strategy

#### Risk Assessment

The assessments evaluate the potential risk associated with the model and use cases, which impacts downstream governance requirements

#### **Process Documentation**

The project teams document the model development process using a standard template



#### Data

Governance of data and privacy life cycle.

## Operations – Monitoring (1st Line)

The deployment team tracks for decay in for decay in performance and maintenance needs

## Managers & Supervisors (2<sup>nd</sup> Line)

#### Standards & Specifications

Business leadership defines the acceptance criteria for a model and outlines the overall requirements.

#### Independent Review & Challenge

Independent review group evaluates model design and tests model performance, and creates review memo to document the testing results, risks and mitigants

#### **Final Approval**

Leadership approve the model validation review memo prior to model delivery

#### **Ongoing Review**

Scheduled monitoring and sign-off on modifications, replacements or retiring of modes, software and data

## Internal (3<sup>rd</sup> Line)

Scheduled reviews of controls and processes.

#### Ethicists (3<sup>rd</sup> Line)

Scheduled ethical review of decisions and alignment with company strategy, culture and mission

Third-Party Assurance Providers

## — End-to-end governance for trustworthy AI



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1. Strategy

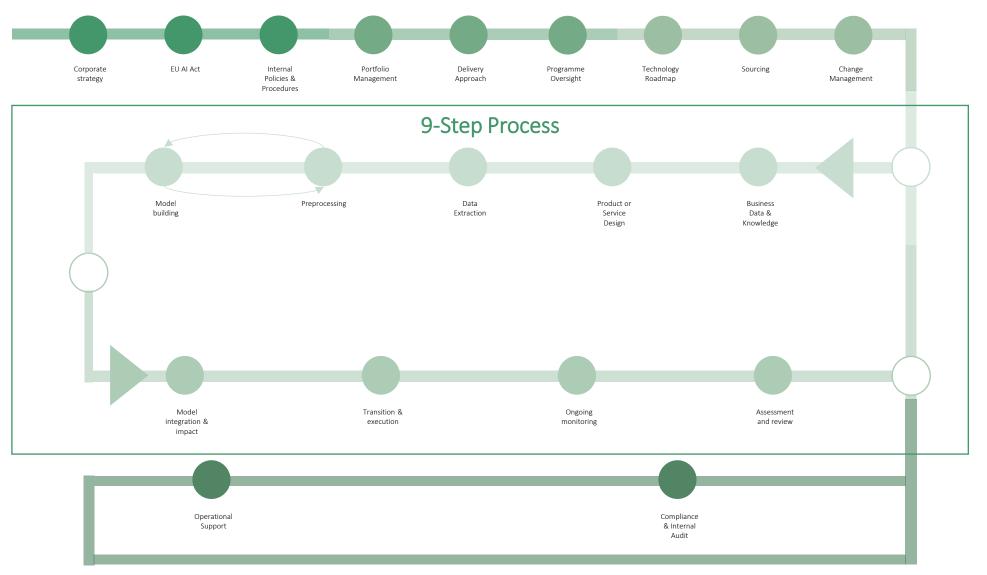
2. Planning

3. Ecosystem

4. Development

5. Deployment

6. Operate & Monitor



## Three stages of trustworthiness for enterprises



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# Innovation \*Triple bottom value Efficiency Compliance

## Innovation

Companies acting in this stage typically have Chief AI Officers (CAIOs) who employ strategie that are focused on long-term value.

Departments are individually accountable to trustworthy metrics, as CAIOs delegate responsibility and monitor results.

This stage involves the greatest amount of focus on trustworthiness as activities are typicall positioned to make a larger impact.

## Efficiency

In this stage, companies have typically progressed to designating a CAIO and developing a EU AI Act strategy.

These activities typically focus on improving a company's bottom line and general perceptior to stakeholders and improving a firm's trustworthiness impact.

This may require new processes and approaches and a greater level of investment.

## Compliance

This is typically the beginning of an organization's trustworthiness journey, prior to a formal EU AI Act strategy is in place.

Initiatives that fit in this stage are directed towards appeasing stakeholders: government, regulatory bodies, or customer perception.

Although these activities can be relatively intensive, they typically present lower benefits to the organization.

# Investment required

<sup>\*</sup>Total value increase for profitability, people and trustworthiness action

## EU Al Act preparedness assessment tool



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d) The organization's current approach to address potential impact (open answer to discuss the organization's approach to potential impact management)

Trustworthiness-oriented innovation (TOI) topics	a) Potential degree of impact (high,

b) Possession of this knowledge (abundant - A, sufficient - S, insufficient - I)

c) Where internal responsibility is held (e.g. VP/Director/Manager XYZ)

#### How is the EU AI Act changing trustworthiness in our industry and markets? 01 Transparency Algorithmic transparency

Impact Category

Accountability

Fairness

02

03

06

· Explainability of AI models · Clear documentation and reporting • Disclosure of AI use and limitations

• Data provenance and lineage

 Al system auditing and compliance • Legal responsibility for AI decisions

• Ethical governance frameworks

• Stakeholder engagement and feedback

· Incident and risk reporting

Bias detection and mitigation

Inclusive AI design

Fairness auditing tools

· Equity in AI outcomes

Diverse data representation

Data minimization practices Privacy

> Consent management systems · Privacy-preserving AI techniques

Anonymization and pseudonymization methods

Secure data storage and access controls

Safety • Al risk assessment models

· Safety validation protocols Robust error detection mechanisms

• Fail-safe systems in AI operations

· Al impact monitoring and response

· Resilience to adversarial attacks Robustness

Continuity planning for AI failures

Stress-testing AI systems

Scalability and adaptability of AI

• Long-term sustainability of AI models

med, low)

## EU AI Act preparedness assessment tool



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# Impact Category

Trustworthiness-oriented innovation (TOI) topics

a) Potential degree of impact (high, med, low)

b) Possession of this knowledge (abundant - A, sufficient - S, insufficient - I) c) Where internal responsibility is held (e.g. VP/Director/Manager XYZ)

d) The organization's current approach to address potential impact (open answer to discuss the organization's approach to potential impact management)

#### How are governmental and social pressures influencing trustworthiness development in our industry and markets?

07 Regulatory Compliance

- Adherence to EU AI Act
- Data protection and GDPR compliance
- Standardization and certification of AI systems
- Environmental, Social, and Governance (ESG) criteria integration
- Compliance auditing and reporting mechanisms

08 F

Public Perceptions

Perceptions and Social Expectations Corporate social responsibility (CSR) in AI use

- Transparency in AI decision-making processes
- User and community engagement in AI development
   Responsiveness to public concerns and criticisms
- Media and public relations strategies for AI initiatives
- 09 Ethical

Ethical Standards • Development of AI ethics frameworks

- Fair and unbiased AI decision-making
- Protection of human rights in AI applications
- Responsible AI innovation and deployment
- · Continuous ethical training and awareness programs

#### What level of coordination of AI-enabled trustworthiness initiatives is necessary in our industry and markets?

10

Inter-Organisational

Practice

Collaboration

- Joint AI research and development initiatives
- Data-sharing agreements with trust and security provisions
- Collaborative frameworks for AI ethics and governance
- Shared AI risk assessment and mitigation strategies
- Establishment of industry consortia for AI trustworthiness
- 11 Standardis and Best

**Standardisation** • Development of industry-wide AI standards

- Implementation of standardized AI auditing procedures
- Adoption of best practices for AI lifecycle management
- Harmonization of AI compliance requirements
- Creation of industry-specific AI trustworthiness benchmarks

12 Cross-Industry Alignment

- Integration of AI trustworthiness across different sectors
- Cross-industry AI ethics and policy forums
- Standardization of AI transparency and accountability
- Alignment of AI safety protocols across industries
- Multi-sector collaboration on Al-driven societal impacts



#	If the C-Suite	Then consider
01	Needs more external information about AI and environmental sustainability-orientated innovation	<ul> <li>Reading and subscribing to news sources and reports on AI trends and trustworthy development</li> <li>Attending professional events on AI opportunities, strategies and emerging risks</li> <li>Meeting with AI researchers, regulators, trusted advisers and trustworthy experts</li> <li>Establishing an emerging technology committee to advise the board or assign a technology advisory role to an existing committee</li> <li>Reading use cases on websites of AI vendors, consultancies and start-ups</li> <li>Speaking with peers and executives on the boards of other companies in the same ecosystem</li> <li>Commissioning (or discovering via conversations with start-ups) third-party perspectives</li> </ul>
02	Needs more internal information about AI and environmental sustainability orientated innovation	<ul> <li>Requesting reports and updates from the executive team on AI pilots and implementations and on programmes to create a culture for AI success</li> <li>Meeting with the executives (chief HR officer, chief information officer, chief risk officer, etc.) engaged in developing a mindset for AI success in innovation, risk management and use</li> <li>Meeting with mid-level human resource managers and teams developing, implementing and using AI</li> </ul>
03	Wants to better understand the potential ethical and legal risks of future AI applications and technologies for sustainability-oriented initiatives	<ul> <li>Setting up an independent ethics board</li> <li>Hiring AI ethicists as advisers</li> <li>Asking legal counsel to report on AI's regulatory requirements and legal risks</li> <li>Engaging with organizations devoted to promoting trustworthy AI and AI ethics</li> <li>Attending or setting up a workshop exploring AI ethics issues</li> </ul>
04	Needs to focus on strategy and business-model innovation for sustainability-oriented initiatives	<ul> <li>Setting up design thinking and ideation sessions</li> <li>Studying AI strategy innovations by competitors and in industry</li> <li>Focusing on developing a culture and organization that supports innovation and experimentation</li> <li>Reviewing executive compensation</li> </ul>



#	If the C-Suite	Then consider
05	Needs to increase benefits from strategic Al initiatives for trustworthiness	<ul> <li>Rapidly improving new AI-enabled systems and processes</li> <li>Investigating new business models</li> <li>Examining new joint ventures and partnerships</li> </ul>
06	Needs to better understand and follow through on the risk, compliance and responsibilities of AI for trustworthy-oriented initiatives	<ul> <li>Working with trusted advisers and legal experts to identify risks, relevant legal issues and ethical concerns</li> <li>Developing an AI governance framework</li> <li>Establishing an ethics board</li> <li>Requesting regular reports on risk and responsibility assurance (see the toolkit's sections on ethics, AI governance and risk)</li> </ul>
07	Questions the value, terms and risks of a major Al contract for trustworthy-oriented initiatives	<ul> <li>Bringing in third parties, including attorneys and consultants, to review the contract</li> <li>Asking the chief financial officer to review and explain questionable parts of the contract</li> <li>Seeking opinions from executives who were not consulted on the deal</li> <li>Asking the chief information officer to report on the implications of the deal for the company's IT infrastructure and technology organization</li> <li>Asking executives who oversee data, legal, ethics and public affairs to analyse the implications of the deal</li> </ul>
80	Needs to understand how competitors are leveraging AI technologies for trustworthy-oriented initiatives	<ul> <li>Hiring benchmarking services</li> <li>Encouraging management to focus on competitor analyses</li> </ul>
09	Needs to improve the stewardship of data for trustworthy-oriented initiatives	Appointing a chief data officer or other executive to take responsibility for data management

## — Guidance tool



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#	If the C-Suite	Then consider
10	Needs more external information about AI and trustworthy-orientated innovation	<ul> <li>Establishing an emerging technology committee to advise the board, or assign a technology advisory role to an existing committee</li> <li>Reading and subscribing to news sources and reports on AI trends and providers</li> <li>Reading use cases on websites of AI vendors, consultancies and start-ups</li> <li>Scanning articles in trade press and journals for professionals in target processes</li> <li>Establishing an educational programme on AI for board members</li> <li>Attending events on AI and on target processes</li> <li>Meeting with venture capitalists, AI technology experts and AI researchers at major universities</li> <li>Speaking with peers and executives on the boards of other companies in the same ecosystem</li> <li>Commissioning (or discovering via conversations with start-ups) third-party perspectives</li> </ul>
11	Wants to better align AI trustworthy-oriented innovation activities with priorities	<ul> <li>Reviewing and reconsidering KPIs and metrics, including creating new metrics</li> <li>Developing an operating model that integrates AI process changes into a new way of doing business</li> <li>Setting up strategy reviews</li> </ul>

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