



From Risk to Readiness: AI Maturity for Compliance-Critical Products

Helping enterprises move from risk-averse to
AI-enabled

Caryn Lusinchi & Bas Overtoom

7th July 2025

With you today

Bas Overtoom

Senior AI Trust Expert



- **Experienced AI & Data Executive**

Over a decade of consultancy experience, driving AI and data transformations for top global organizations.

- **Responsible AI Advocate**

Passionate about responsible AI to address business, social, and environmental challenges.

- **Global Business Expertise**

Strong international background, including seven years in Asia, fostering cross-cultural collaboration. Leads global business development at Nemko Digital, promoting AI Trust worldwide.

- **VC Advisor for AI Scale-Ups**

Supports AI startups within a prominent Dutch VC fund to achieve global growth.

Caryn Lusinchi

AI Strategy Lead



- **AI Governance & Risk Management Expertise**

Implemented NIST AI RMF, NIST expanded AI-600-1 (Generative AI Profile), GDPR and EU AI Act across software development process and AI/ML lifecycles.

- **AI Credentialed Auditor**

FHCA certified as an AI auditor under EU AI Act and GDPR, with a certificate in the Foundations of Independent Audit of AI Systems.

- **Thought Leader & Lecturer**

Non-resident fellow in AI Global Governance for the Global Governance Institute in Brussels on emerging technology policy evolution plus responsible and sustainable AI development.

- **Conversational AI Product Scalability & Monitoring**

Led GTM for GPAI monitoring software startup and brings tenure scaling AI-based products across NA, EMEA, APAC and LATAM for Google and Meta.



Nemko has created Trust since 1933

In our increasingly digital world, trust in digital systems, services, and transactions is paramount. Some of the critical elements of digital trust include Security, Privacy, Reliability, Transparency, Compliance, User Experience, and Ethical Use of Technology.

Nemko Digital offers digital trust solutions, complementing Nemko's existing services, to extend its commitment to its customers and support them into the digital realm.

Physical Trust



Nemko made the physical world a safer place since 1933

VS.

Digital Trust



Nemko augmented its proposition by Providing Trust in a Digital World



Value drivers for AI governance, compliance & quality management



Compliance with upcoming regulation



Reputation as leading global company



Control to prevent incidents / harm



Stakeholder demands around use of AI



Competitive advantage on the market



Just some random examples of the dangers of AI

- **"AI chatbot pushed teen to kill himself, lawsuit alleges"**

A Florida mother is suing a tech company over an AI chatbot that she says pushed her 14-year-old son to kill himself.

- **"AI chatbot 'tried to encourage teenager to kill his parents'"**

A lawsuit claims an AI chatbot encouraged a teenager to harm his parents.

- **"Tesla driver using Autopilot kills motorcyclist, prompting another NHTSA investigation"**

A motorcyclist was killed after being rear-ended by a Tesla in Autopilot mode.

- **"AI-generated robocalls mimicking Biden's voice investigated in New Hampshire"**

Authorities are investigating AI-generated robocalls that impersonated President Biden.

- **"Inside the rise of deepfake nudes of teachers"**

Students have used AI to create deepfake nude images of teachers.

- **"McDonald's ends AI experiment after drive-thru ordering blunders"**

McDonald's discontinued its AI-driven ordering system due to numerous errors.

- **"Air Canada Ordered to Pay for AI Chatbot's False Promise"**

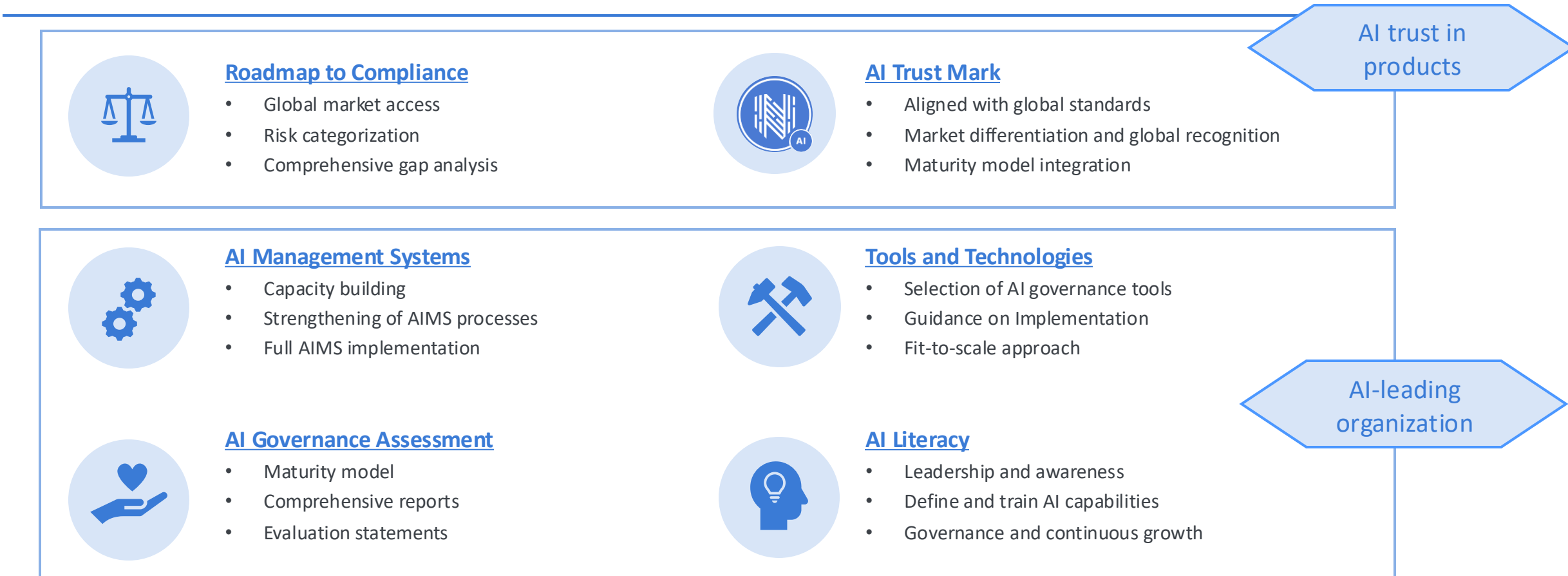
Air Canada was held liable after its AI chatbot provided incorrect information.



Key interests from customers

Nemko Digital leverages over 90 years of compliance expertise to offer end-to-end governance, risk assessment, and assurance services tailored to evolving AI regulations and standards in alignments with product legislation.

Key interests



AI Maturity Governance Assessment

Providing a framework to improve your AI maturity

Why Multinationals Conduct an AI Governance Maturity Assessment



- **Understand the current AI landscape and governance gaps** across the organization.
- **Align leadership on priorities** to ensure AI is developed and deployed responsibly.
- **Enable scalable and sustainable AI operations** through structured processes and oversight.
- **Navigate evolving global regulations** to stay ahead of compliance and avoid penalties.
- **Mitigate ethical, reputational, and operational risks** associated with AI systems.
- **Benchmark against industry standards** to assess competitiveness and maturity.
- **Strengthen stakeholder trust and market positioning** by demonstrating AI accountability and transparency.



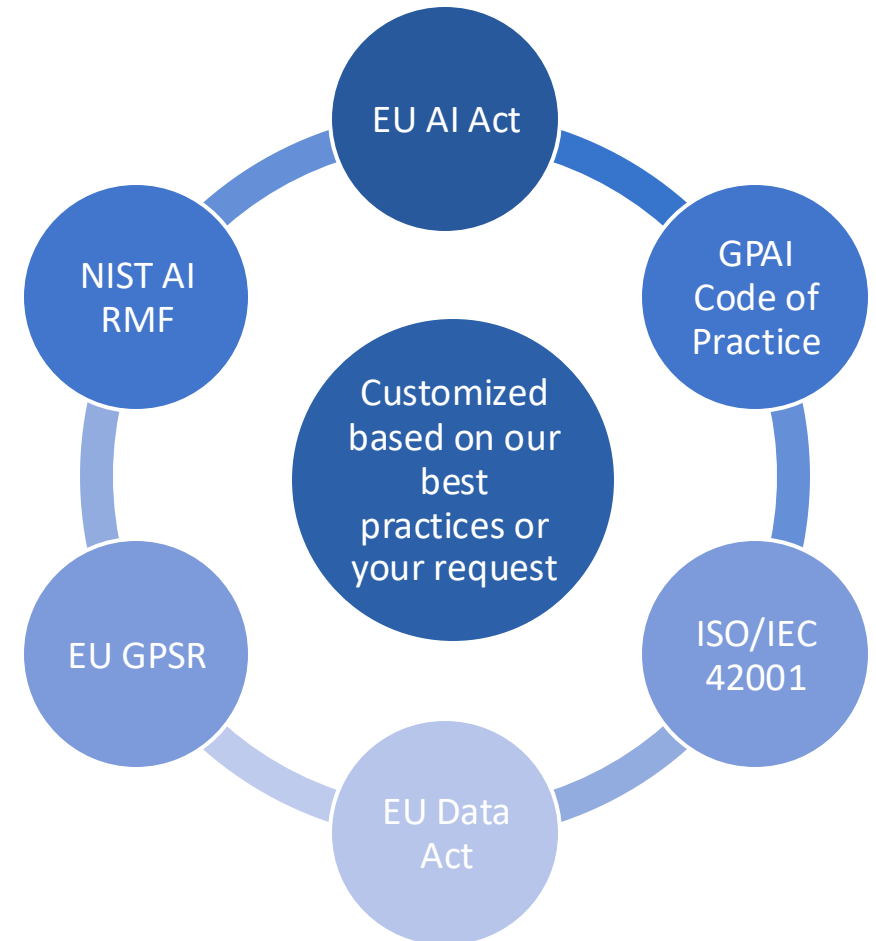
Nemko's AI Governance maturity model

We have developed an AI Governance maturity framework based on the four leading global standards, enriched by industry best practices, and designed with flexibility to accommodate individual organizational needs, including specific national or regulatory requirements.

- Understand your current enterprise AI landscape and strategically plan for leadership improvements to maintain competitive edge and market differentiation.
- Measure AI maturity across key categorical dimensions to ensure scalable, sustainable and executable AI strategy.
- Navigate the complexities of AI regulation and best practices to stay ahead of compliance, operational risk and governance.

Key global frameworks are the foundation of our model

- ISO 42001: *The global standard for AI governance, risk management, and accountability.*
- EU AI Act: *Align AI with stringent European risk framework regulations for safe and trustworthy deployment*
- NIST: *U.S. AI standards for operational integrity, cybersecurity and safety.*



Eight essential building blocks for your AI success

Our AI Governance maturity framework comprises eight clearly defined building blocks, each addressing a critical dimension necessary for successful, responsible, and scalable AI implementation. These blocks are designed based on global AI governance standards and industry best practices. Together, they ensure a structured and holistic approach, providing organizations with a robust yet flexible foundation to confidently navigate AI-related opportunities and challenges.

*Leadership &
Governance*

*AI Lifecycle
Management*

*External
Stakeholders*

People & Culture

Operations

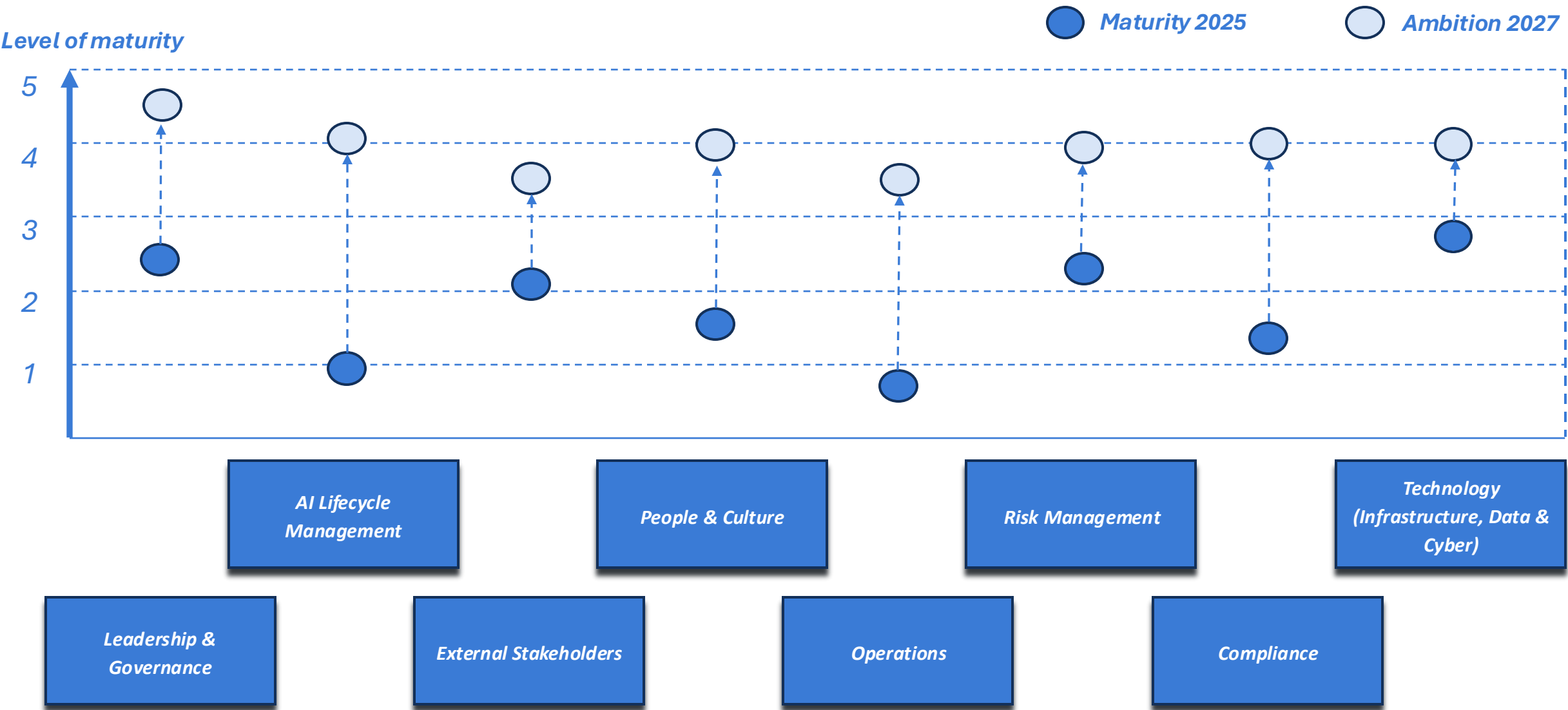
Risk Management

Compliance

*Technology
(Infrastructure,
Data & Cyber)*



Understand exactly where you are today and what needs attention



AI Governance Maturity Levels

Level of maturity



Understanding your AI governance maturity level across 8 different categories is crucial in today's emerging AI technology market to confidently navigate the complexities of implementing AI responsibly, efficiently, and securely.

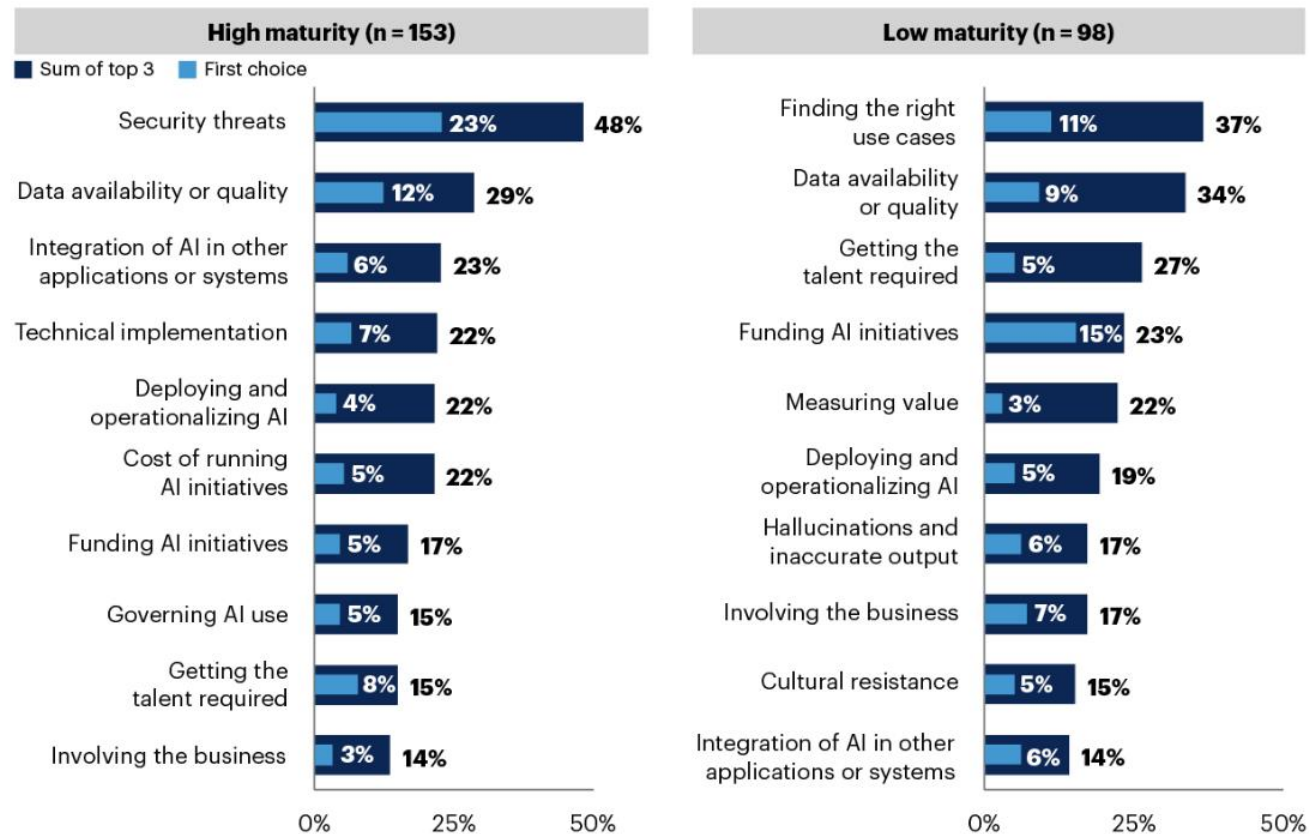
By advancing maturity levels, it empowers alignment with best practices, regulatory requirements, and risk management strategies, enabling enterprises to maximize AI's value while minimizing potential pitfalls.



Challenges Differ for High and Low AI Maturity Organizations

Top Barriers for AI Implementation

Percentage of respondents



n varies; AI leaders whose organizations deployed at least one AI use case in production

Q: What are or will be the top three barriers to the implementation of AI initiatives within your organization?

Source: 2024 Gartner AI Mandates for the Enterprise Survey

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Gartner



Quiz



These are the building blocks of an AI driven organization

Leadership & Governance	AI Strategy & Business impact	Value/business case & ROI	Governance & org design	Ethics & principles	Finance & resources	Human rights & Sustainability
AI Lifecycle Management	Use case scoping design	Data collection & quality	Development & testing	Deployment & monitoring	Decommission & retirement	Human in the loop
External Stakeholders	Partnership & co-development	Customers & end-users	Supply chain & procurement			
People & Culture	AI trainings & literacy program	Org change & adoption	Culture shift: AI mindset	Incentives & policy alignment		
Operations	Processes & procedures	Internal controls	Continuous improvement	AI Performance management	Data management	AI inventory
Risk Management	Risk assessment & mitigation	Risk tracking & escalation	Incident & crisis management			
Compliance	Documentation & record keeping	Regulatory monitoring	Audit readiness & assurance	Data privacy requirements	Transparency & explainability	Fairness
Tech (Infra, Data & Cyber)	Technical infrastructure	Architecture & solution design	Cybersecurity	Data pipelines & platforms		



These are the building blocks of an AI driven organization



Leadership and Governance Maturity

Level of maturity



AI maturity empowers leadership to make informed, strategic decisions, supported by strong governance frameworks that ensure AI initiatives are aligned with organizational objectives, ethical standards, and sustainable growth.



What is good leadership commitment when it comes to AI?

AI Strategy & Business Impact

- Define how AI supports your core mission and long-term competitive edge.
- Integrate AI into corporate strategy, not just IT or innovation silos.

Value / Business Case & ROI

- Focus on measurable outcomes, not just experimentation.
- Link AI investments to real business value: efficiency, customer experience, new revenue.

Governance & Organizational Design

- Set clear ownership for AI risk, compliance, and performance.
- Build cross-functional teams and establish internal controls.

Ethics & Principles

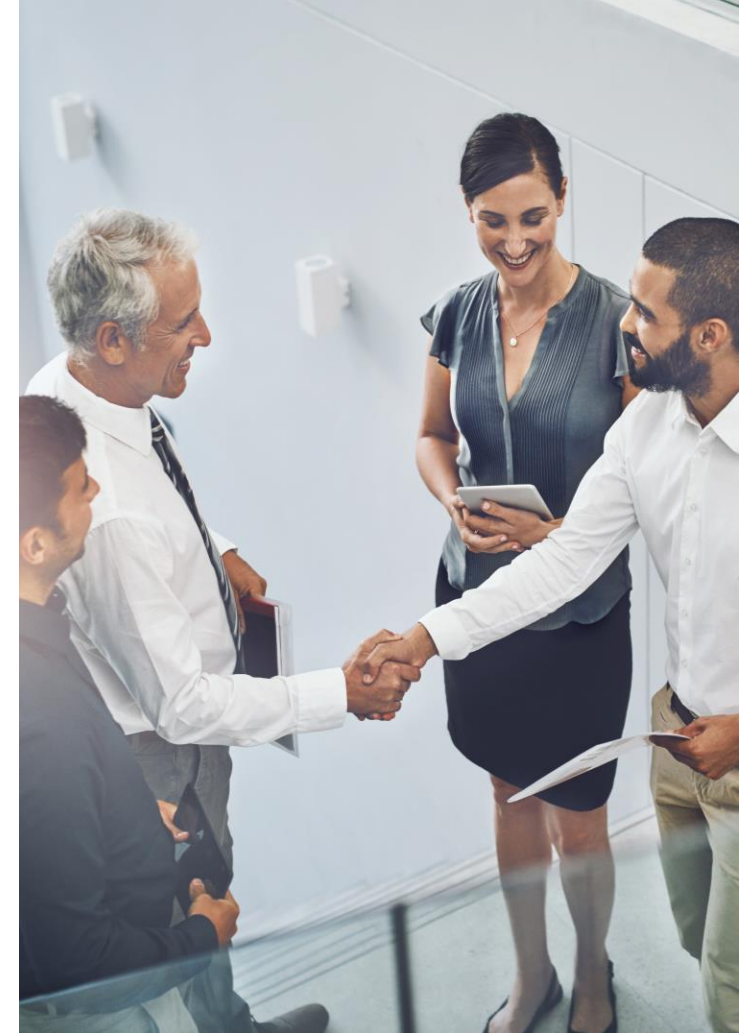
- Operationalize values like fairness, transparency, and accountability.
- Implement tools and frameworks for ethical impact assessments.

Finance & Resources

- Secure dedicated budgets and skilled talent for AI governance, not just development.
- Balance investment in innovation with investment in oversight.

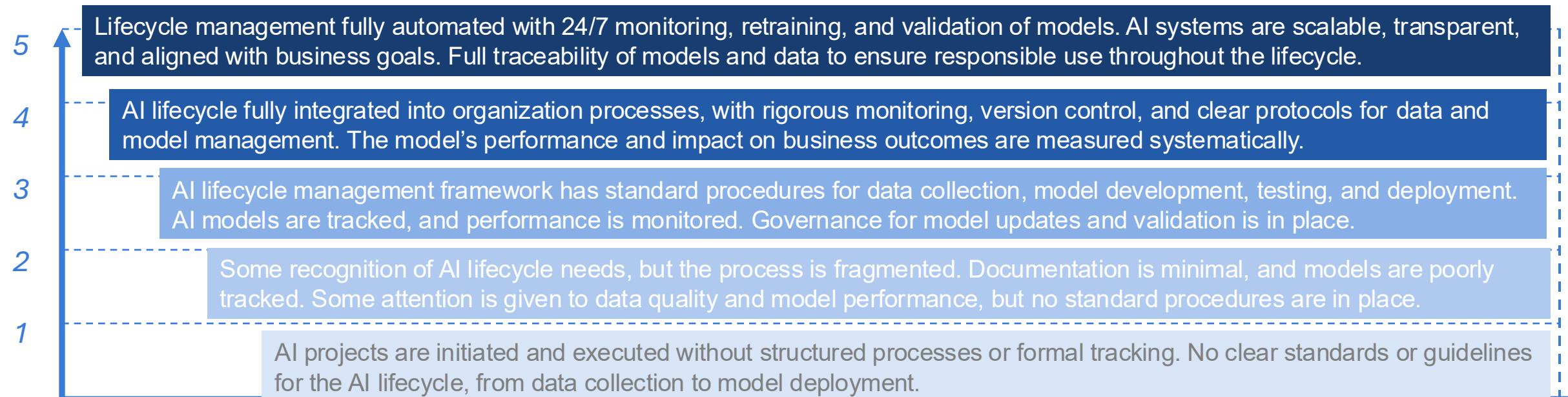
Human Rights & Sustainability

- Ensure AI systems respect privacy, dignity, and non-discrimination.
- Assess and mitigate environmental and societal impacts of AI use.



AI Lifecycle Management Maturity

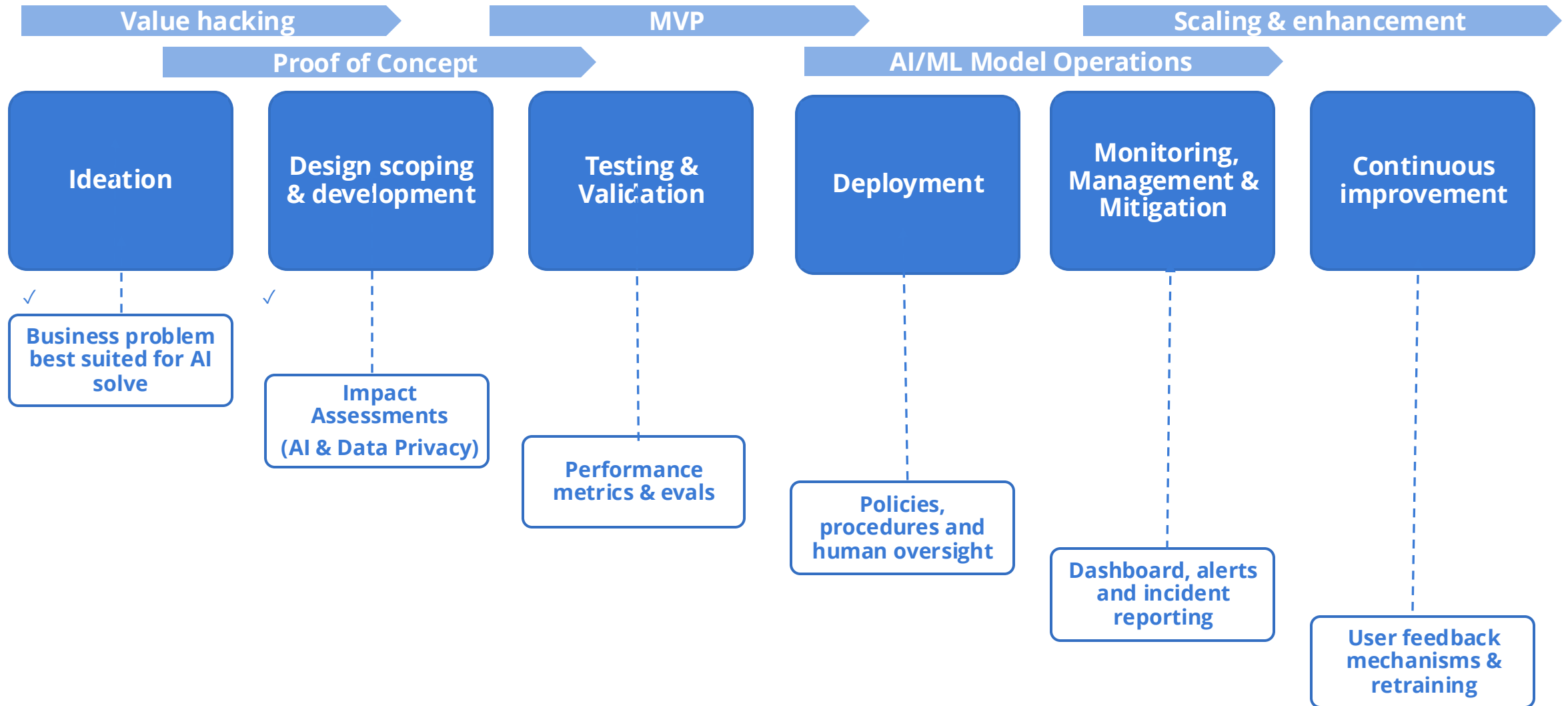
Level of maturity



AI maturity ensures that AI models and solutions are effectively managed throughout their lifecycle, from development to deployment and continuous improvement, leading to better performance, scalability, and long-term success.

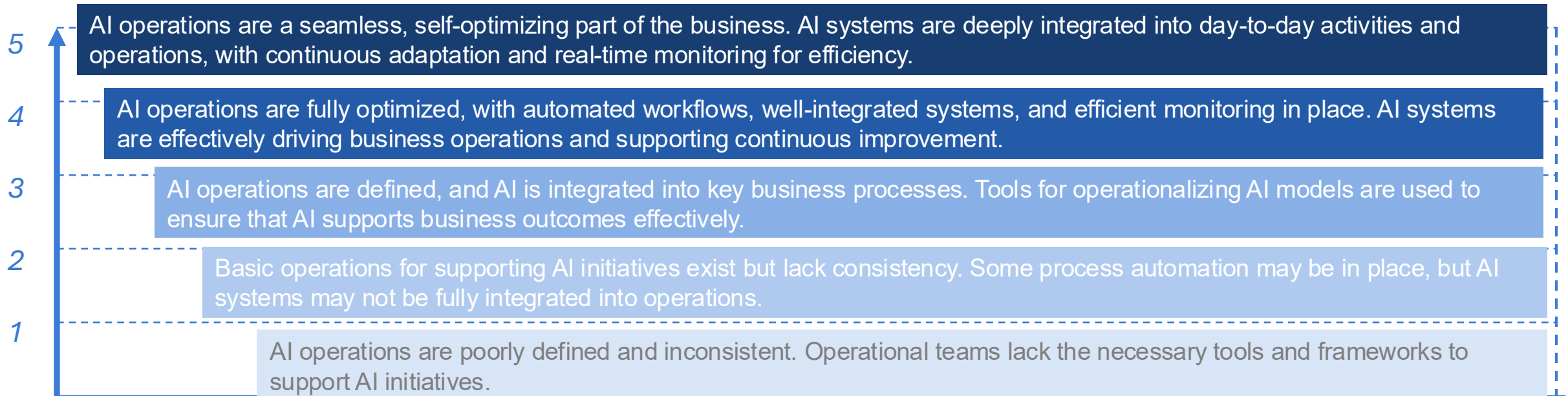


Understanding the AI life cycle – from governance perspective



Operations Maturity

Level of maturity



A high level of AI maturity optimizes operational efficiency, driving automation, streamlining workflows, and enabling data-driven decision-making, which ultimately improves productivity and cost-effectiveness.



AI Use Case Inventory: A Strategic Tool for AI Operations

Centralized record of AI use cases across an enterprise and underlying systems/tools

Business Drivers



What Should Be Tracked?

- ✓ Use case description
- ✓ AI systems
- ✓ AI vendors used in supply chain
- ✓ Ownership (business and technical)
- ✓ Approval dates
- ✓ Risk profile
- ✓ Lifecycle/Deployment status



How to Build and Maintain Your AI Use Case Inventory

Dependent on your enterprise's stage of AI Maturity

Basic Method

- Keep track of details with field labels: Use case ID, ownership, AI system, risk, status, impacts, inception dates, review dates
- Track in Excel, Sharepoint, Teams or Microsoft Forms

Advanced Method

- Third party automated tooling with built-in options/API to model pipelines within AWS, Google or Azure
- Connect inventory to visual dashboarding for executives for see AI progress at-a-glance.



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Best Practices

- Maintain high risk use cases quarterly; others annually
- Maintain public vs. private use case lists to balance transparency and security



Stages of AI Use Case Inventory Execution

Start small and slowly build to full implementation

Execution Stages

IDENTIFIED	Informal documentation on Excel spreadsheets. Unknown risks. Technical but not business ownership. Experimental use cases
SYSTEMIZED	Ownership and risk defined. Governance approval starts. Different systems used for similar use cases. No set review process.
IMPLEMENTED	Most AI use cases are in production. Impacts and risks are mitigated. Ownership and oversight in place. Executive visibility.

Governance Good to Know

- Not mandated under the EU AI Act but it's a best practice for regulatory preparedness
- Required information under many EU national AI registries/databases for high-risk industries (medical, finance)
- Supports NIST AI RMF 1.0 framework and signals AI accountability



The road ahead



Your Pathway to AI Excellence, Governance & Trust

AI Maturity Assessment

Engage stakeholders across your enterprise to assess AI maturity across categories.



Enterprise Readiness Readout

Receive a comprehensive readout of maturity across categories and SWOT analysis.

Roadmap to Close Maturity Gaps

Deliver a quarterly or annually roadmap to reach the next level of maturity.



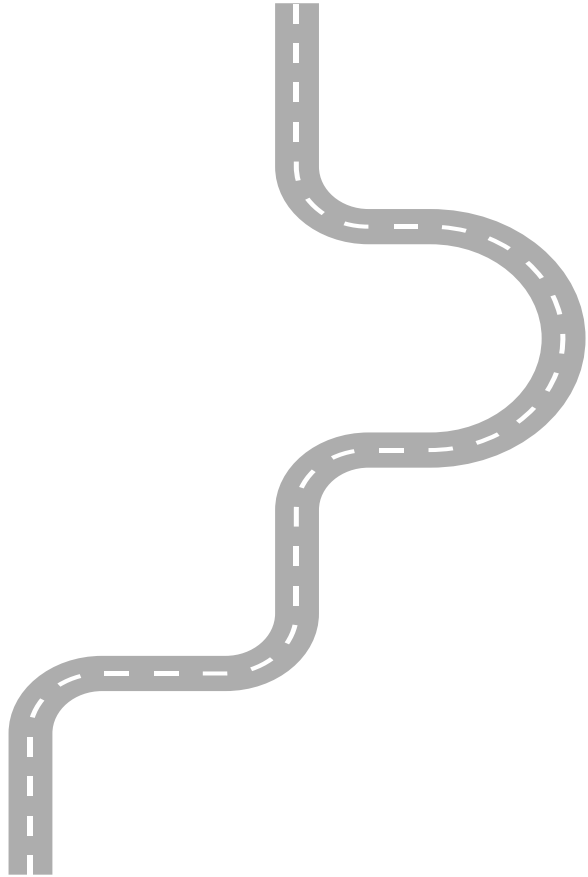
Maturity Implementation Advisory

Customized, crafted ad-hoc services to support roadmap execution & resource planning and governance activities



AI Strategy Roadmap: Prioritization to Implementation

To develop a clear and actionable AI roadmap, we will apply a prioritization framework that balances impact, feasibility, and strategic alignment — enabling us to sequence initiatives pragmatically and build a phased implementation plan.



- **Strategic Priorities & Use Cases**
Aligning AI initiatives with business goals, stakeholder needs, and areas of high impact.
- **Maturity Gaps & Capability Building**
Targeted actions to close identified gaps in governance, infrastructure, talent, and data readiness.
- **Regulatory Alignment**
Milestones to ensure alignment with local and international legal and ethical requirements.
- **Quick Wins & Long-Term Enablers**
A balance between short-term, visible outcomes and long-term strategic foundations.
- **Technology & Infrastructure Investments**
Phased actions for building or enhancing the AI development environment.
- **Organizational Enablement**
Key initiatives for training, change management, and embedding responsible AI practices.
- **Monitoring & KPIs**
Clear metrics and review checkpoints to track progress and adjust as needed.



What the Supporting Implementation Guide Will Contain

To support effective execution of the AI strategy, we will provide a practical implementation guide that translates the roadmap into clear actions, ownership, timelines, and tools for delivery.

- **Detailed Action Plans per Workstream**
Objectives, activities, owners, dependencies, and timelines.
- **Governance & Roles**
Clear accountability structures and escalation paths.
- **Resource and Budget Estimates**
High-level resource needs, including tools, people, and external support.
- **Templates & Tools**
Practical templates (e.g., risk registers, AI use case scorecards, capability checklists).
- **Monitoring & Evaluation Framework**
Metrics and mechanisms for ongoing assessment and roadmap recalibration.
- **Risk Management Measures**
Key risks and mitigation strategies to safeguard delivery.



*From some key workstreams
we can bring best-in-class proposition
approaches to accelerate your results.*

AI literacy roles – complete overview

These are the primary AI-related roles in an organization and can be used to structure a **robust AI literacy program**, ensuring targeted training, governance, and compliance. This approach equips each role with the **specific knowledge needed** to drive responsible AI adoption.

Assign developed programs to the key roles in your organization

illustrative example

	AI Fundamentals for Business	Responsible & Ethical AI usage	AI Governance & Risk Management	AI for Product & Services	AI model development	AI Procurement & Vendor Management
AI Leader (Top Level)	✓	✓	✓			✓
AI Governance Experts	✓	✓	✓	✓		✓
AI Product Owner	✓	✓				
AI User	✓	✓		✓	✓	
AI Developer	✓	✓	✓		✓	✓
Data for AI Experts						



Making it concrete with next steps

We offer three levels of AI maturity assessment, each tailored to match the organization's stage of AI adoption, strategic needs, and desired depth of insight. This tiered approach ensures flexibility, allowing organizations to start small or go deep depending on their objectives and internal readiness.



AI Maturity Quick Scan

- Rapid, high-level assessment with a small group of key stakeholders
- Focus on identifying strengths, weaknesses, and immediate action areas
- Outcome: Summary of findings and indicative next steps
- Ideal for quick orientation around AI readiness and governance



Focused Assessment

- Assessment of a specific unit (e.g., department, function, regional spoke)
- Provides maturity scorecard, prioritized recommendations, and tailored insights
- Useful for piloting the maturity framework or preparing for broader rollout
- Helps uncover local best practices that can be scaled across the organization



Full Organization wide-assessment

- Comprehensive evaluation across the entire organization
- Includes optional deep dives (e.g., data, governance, compliance, infrastructure)
- Delivers benchmarking, strategic roadmap, and implementation guide
- Equips leadership to drive AI transformation effectively and responsibly

- ✓ Enable evidence-based decision-making on AI investments and priorities
- ✓ Align stakeholders around a shared understanding of current capabilities and future goals
- ✓ Provide a structured foundation for long-term AI strategy, transformation, and compliance readiness



Next Steps

Deepen your knowledge and gain new AI insight

Our 30-min webinars – Summer Edition

Playbook for Responsible AI Development



AI Developer's Playbook

A step-by-step guide designed to help engineering and product teams develop AI systems that are safe, effective, and aligned with regulatory expectations.

August 20th 2025

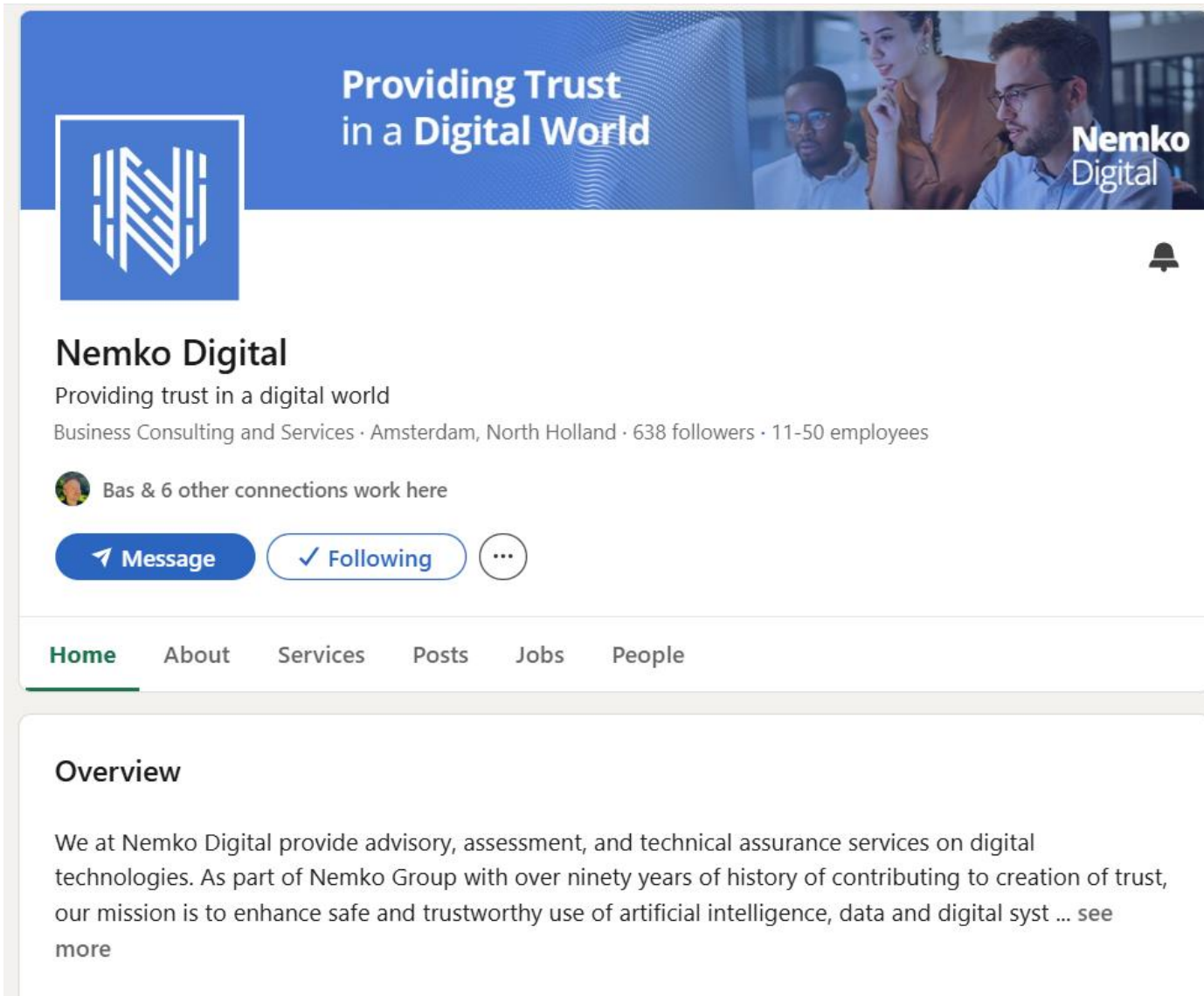
AI Governance Tooling & Technologies

Explore how leading organizations are using purpose-built tools to support AI governance, risk management, and compliance

September 11th 2025



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For complete details about our services, visit digital.nemko.com or explore our brochure.

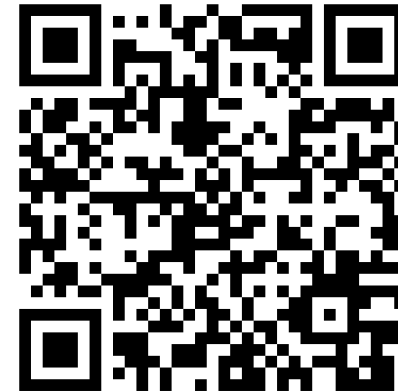


Next steps



15-Minute AI Consultation: Tailored Insights for Your Business

Additionally, we provide a 1 – 1,5 hour deep dive session to help evaluate your product and how we can best support you and your team.



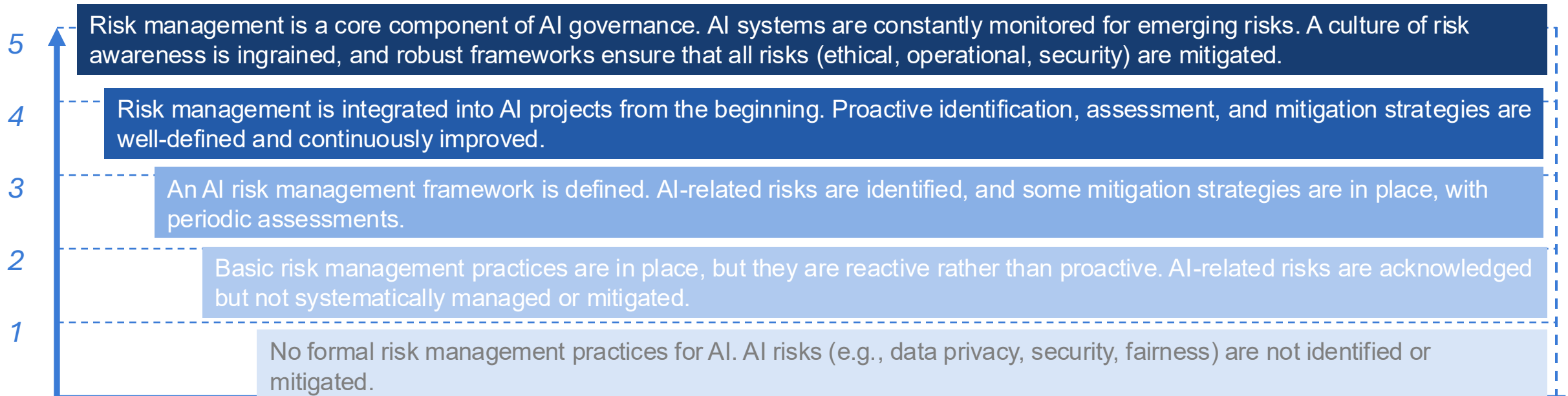


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Digital

Appendix

Risk Management Maturity

Level of maturity

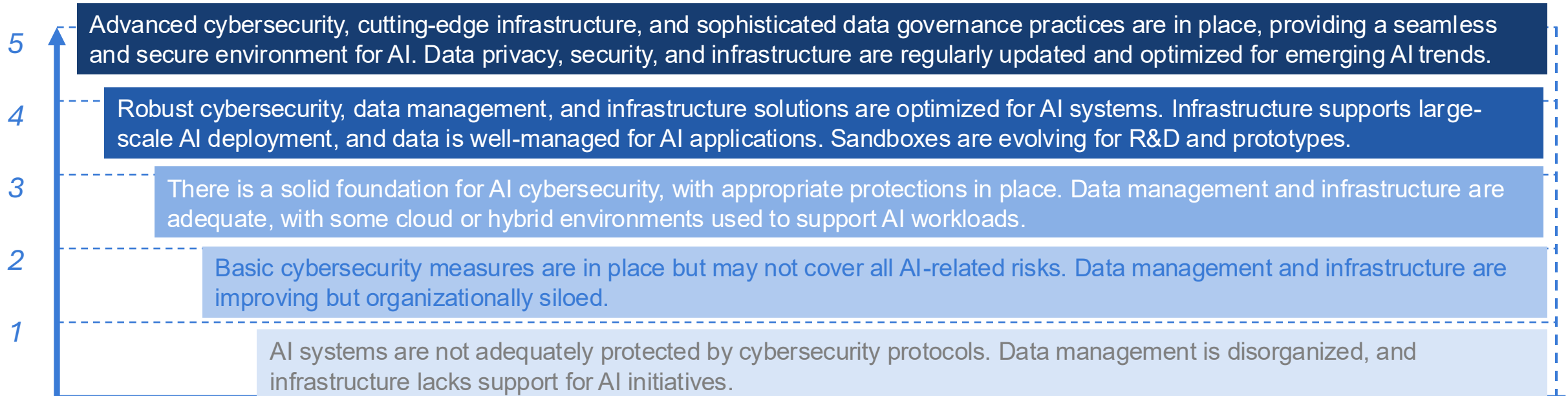


Mature AI systems have established risk management protocols, enabling proactive identification, mitigation, and monitoring of potential risks, which reduces operational and financial uncertainties.



Technology (Infrastructure, Cybersecurity and Data) Maturity

Level of maturity



Mature AI systems ensure robust infrastructure, strong cybersecurity measures, and high-quality, reliable data management, which is essential for scaling AI applications securely and efficiently.



Enterprise Stakeholders Maturity

Level of maturity

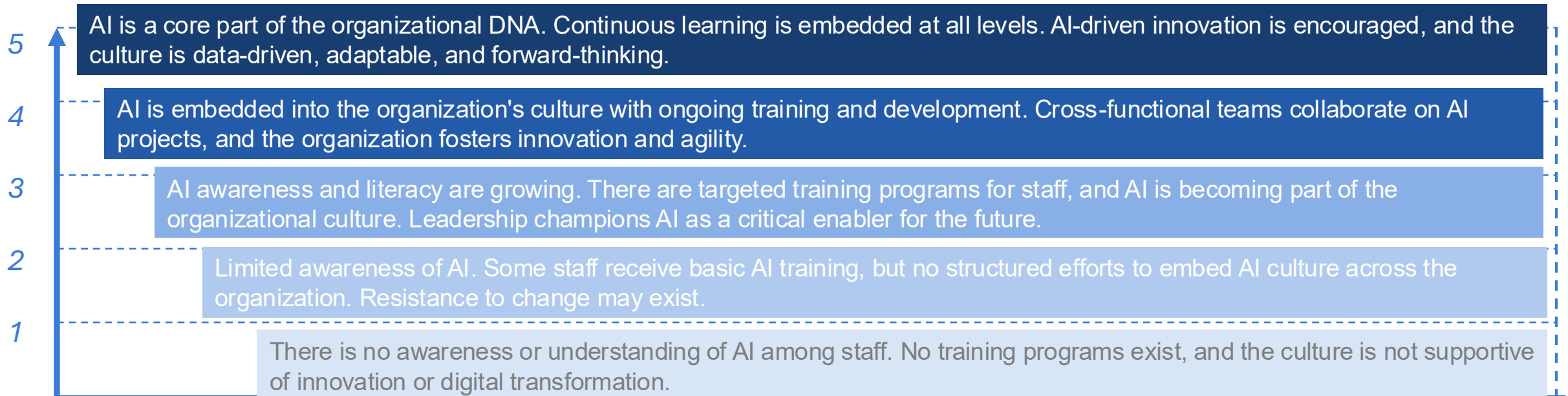


Mature AI processes enable better alignment with enterprise stakeholders' goals, improving communication, transparency, and accountability, while providing measurable value from AI investments.



People and Organizational Culture Maturity

Level of maturity

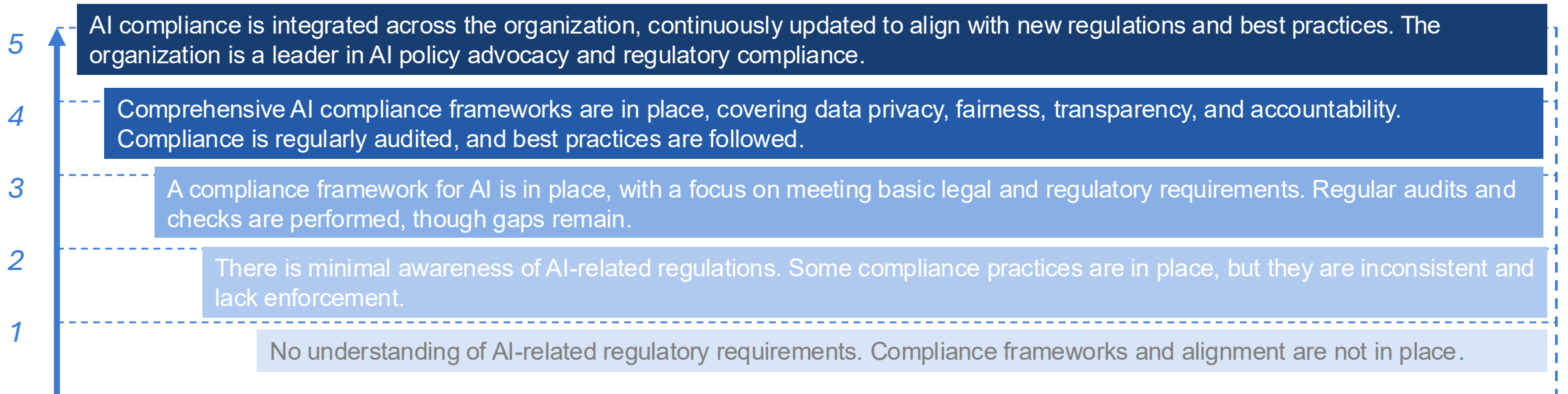


As AI maturity progresses, organizations can foster a culture of continuous learning, collaboration, and innovation, empowering teams to embrace AI-driven change and enhancing skill development across the workforce.



Compliance Maturity

Level of maturity



AI maturity guarantees that enterprises adhere to relevant regulations and legal frameworks, reducing the risk of non-compliance penalties and ensuring ethical use of AI technologies.

