

AI and IT Governance

AI systems are moving from experimentation into enterprise-critical operations. The question is no longer whether to govern them but how — without strangling innovation. *AI and IT Governance* provides a rigorous, immediately applicable answer: a unified framework that bridges classical IT governance (COBIT, ITIL, ISO/IEC 38500) with the demands of machine learning lifecycle management, EU AI Act compliance, and responsible AI deployment. Across 19 chapters and five parts, the monograph spans foundations, key components, implementation, real-world case studies, and the future of AI governance:

- Ethics & algorithmic bias — three case studies (healthcare, mortgage lending, content moderation) reveal where governance gaps form and how to close them; a dedicated section on dual-use AI capabilities and cybersecurity (Claude Mythos) rounds out the ethical frontier.
- Regulatory landscape — EU AI Act risk tiers, GDPR interaction, ISO/IEC 42001 conformity assessment, and an international comparison across major jurisdictions.
- Risk management — adversarial threats, model drift monitoring, and a risk portfolio approach calibrated to harm potential.
- Data governance — lineage, quality dimensions, feedback loops, and GDPR-compatible data-role assignments.
- Organisational model — role catalogue, RACI templates, three-lines-of-defence integration, and committee mandates ready for immediate use.
- AI project lifecycle — shift-left governance, quality gates G0–G5, change management, and structured decommissioning.
- Tools & MLOps — technology selection matrix covering open-source and commercial platforms.
- Personnel & culture — competency model, psychological safety, and incentive design for a sustainable governance mindset.
- ISO/IEC 42001 — AIMS implementation roadmap and clause-level mapping to the IKI-Gov reference model.
- IKI-Gov reference model — the book's core contribution: six governance domains × six lifecycle phases × six measurement points, with a companion open-source CLI assessment tool (presidio-hardened-ikigov-assess).

Why This Book

- Integrates strategy, law, ethics, data, and operations in one coherent model — no silo approach
- Regulation-aware as of Q1 2026 (EU AI Act, ISO/IEC 42001, GDPR)
- 43 schematic figures, workshop-ready checklists, and quality-gate templates for direct application
- IKI-Gov assessment tool freely available as open-source CLI

Target group

CIOs, CAIOs, and AI product owners seeking strategic clarity; compliance, legal, and data-protection teams navigating EU AI Act and GDPR obligations; data scientists and MLOps engineers who need governance context for their daily work; risk managers and internal auditors building AI-specific control frameworks; and graduate students in information management, business informatics, or law.

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74,89 €

69,99 € (zzgl. MwSt.)

vorbestellbar, Erscheinungstermin ca. Januar 2027

Artikelnummer: 9783662740019

Medium: Buch

ISBN: 978-3-662-74001-9

Verlag: Springer

Erscheinungstermin: 14.12.2026

Sprache(n): Englisch

Auflage: Erscheinungsjahr 2026

Produktform: Gebunden

Seiten: 196

Format (B x H): 155 x 235 mm

