Entrepreneurial Program Management for AI-Driven Transformation

Practical guidance document

Disclaimer

The materials provided are for general informational and overview purposes only and do not constitute legal, financial, technical, or professional advice. No guarantee is made as to completeness, accuracy, timeliness, or fitness for any particular purpose.

Proprietary materials (all rights reserved). Supplied solely for the recipient's review and not to be copied, distributed, quoted, or disclosed to any third party without the authors' prior written consent.

No offer, commitment, or undertaking is made or implied by these materials. Any views expressed are subject to change without notice.

To ask specific questions about the content or to discuss commissioning or related activities, please contact the authors via

www.SEACapita.com/Contacts

Exclusion of Liability

To the maximum extent permitted by law, the authors and their affiliates disclaim all warranties, express or implied, and shall not be liable for any loss, damage, liability, or expense of any kind (including without limitation direct, indirect, incidental, consequential, special, punitive, or exemplary damages) arising out of or in connection with the use of, reliance on, or distribution of these materials, even if advised of the possibility of such damages.

Any decisions made or actions taken based on these materials are at the recipient's sole risk. The recipient is responsible for obtaining independent advice as needed.

No Reliance; No Duty to Update

Recipients should not rely on these materials as a substitute for independent judgment or professional advice. The authors undertake no obligation to update, supplement, or correct the materials after the date provided.

Reservation of Rights

All rights in and to the materials are reserved. Acceptance or review of the materials constitutes agreement to these terms. If you have received these materials in error, please delete them and notify the authors immediately via

www.SEACapita.com/Contacts

Table of Contents

Introduction

Artificial Intelligence (AI) programs—whether focused on augmenting legacy processes (AI First), creating entirely new AI-native capabilities (AI Native), or combining both—are fundamentally different from traditional IT or business change initiatives. They operate under higher uncertainty, tighter regulatory scrutiny, faster technology cycles, and greater interdependence between disciplines such as data science, IT, legal, security, compliance, and business operations. In this context, Program Management roles cannot be purely administrative or procedural. They demand an entrepreneurial mindset and attitude.

This report explains why AI program management greatly benefits from a software entrepreneur background, how such a mindset improves governance, planning, KPIs, and team structure, and why experience with supply chain and procurement further increases the probability of program success. It also includes practical considerationoins for managing multidisciplinary AI programs and addresses key compliance topics such as the EU AI Act, AVG (GDPR), and NEN 7510 / ISO 27001. Finally, it highlights how entrepreneurial behavior contributes to team spirit and motivates teams to achieve stretch targets.

1. Why AI Programs Require an Entrepreneurial Mindset

AI programs differ from classical projects because:

- Outcomes are probabilistic, not deterministic: models improve iteratively; there is no simple ‘go live once and forget’.
- Requirements evolve as insights emerge: early prototypes change stakeholder expectations, often significantly.
- Dependencies span multiple domains: data availability, data quality, infrastructure, security, compliance, and business adoption are tightly interwoven.
- Regulatory and ethical constraints are dynamic: the EU AI Act and data protection rules are evolving, requiring constant adaptation.
- Value realization depends on behavior change: success is not only technical but also organizational, requiring adoption by end users and alignment with business KPIs.

Such characteristics mirror the environment in which software entrepreneurs operate: high uncertainty, ambiguous requirements, frequent pivots, constrained resources, and strict success criteria (product–market fit, paying customers, sustainable margins). An entrepreneurial program manager is therefore better equipped to:

- Embrace uncertainty and manage risk through experimentation rather than over-specification.
- Frame the program around value hypotheses and measurable outcomes, not just deliverables.
- Make pragmatic trade-offs between scope, quality, speed, and compliance.
- Engage stakeholders with a compelling product/vision narrative instead of purely procedural reporting.

- Continuously scan the market for technologies, vendors, and partners that can accelerate results.

2. AI First, AI Native, and Hybrid Programs

2.1 AI First (Modernizing Legacy Processes with AI)

AI First programs introduce AI into existing or legacy processes—e.g., automating manual document classification, improving demand forecasting, or augmenting customer service. The entrepreneurial program manager must:

- Identify high-ROI use cases within constraints of legacy systems.
- Balance quick wins with long-term architectural coherence.
- Negotiate changes with process owners who may be risk-averse or skeptical about AI.
- Design experiments (pilots, A/B tests) that prove value while minimizing operational disruption.

2.2 AI Native (Building New AI-Driven Capabilities)

AI Native initiatives create entirely new products, services, or operating models where AI is core—for example, fully automated decisioning engines, AI-based triage systems, or digital assistants embedded in core workflows. Here the entrepreneurial program manager:

- Acts almost like a founder: validating problem–solution fit, iterating on prototypes, and rapidly incorporating user feedback.
- Builds the capability stack from scratch: data platforms, MLOps, security controls, and governance.
- Shapes commercial and business models in parallel with technical development.

2.3 Hybrid Programs

Many strategic AI programs combine modernization and greenfield elements: they both upgrade existing workflows and introduce net-new capabilities. This increases complexity and requires entrepreneurial judgment on where to:

- Re-use versus rebuild components.
- Standardize versus allow local experimentation.
- Sequence delivery to balance legacy stability with innovation speed.

3. Governance, Planning, and KPIs with an Entrepreneurial Lens

In mission-critical AI programs, governance must assure control and compliance while still enabling rapid learning and iteration. An entrepreneurial program manager designs governance as an enabler, not a brake.

3.1 Governance

- Establish a cross-functional AI Steering Committee (business, IT, data, risk, legal, compliance, security, procurement) with clear decision rights.

- Create a lightweight AI Risk & Ethics Board to review high-risk use cases in line with the EU AI Act and internal policies.
- Define clear stage gates (ideation, experimentation, pilot, scale) with criteria that combine business value, technical feasibility, and compliance readiness.

3.2 Planning

Classical linear planning is insufficient when AI performance and user adoption are uncertain. The entrepreneurial program manager:

- Uses an adaptive roadmap that mixes discovery sprints, build sprints, and hard milestones for regulatory and security approvals.
- Plans for iterative model improvements and data quality work, not just application development.
- Maintains explicit contingency options (vendor alternatives, architectural choices, scope trade-offs) to respond to new information.

3.3 KPIs and Success Metrics

Entrepreneurial program management emphasizes outcome-focused KPIs, such as:

- Business value: cost reduction, revenue uplift, throughput improvement, error-rate reduction, NPS/CSAT improvement.
- Adoption: active users, usage frequency, workflow coverage, satisfaction per role.
- AI performance: precision/recall, false-positive/false-negative rates, model drift indicators.
- Compliance & risk: number of findings in audits, time to remediate, percentage of models with completed DPIA and AI Act risk classification.
- Delivery health: sprint predictability, lead time from idea to pilot, incident frequency and severity.

4. Team Structure for Complex, Integrated, Multidisciplinary AI Programs

Mission-critical AI programs require integrated teams that combine domain expertise, engineering, data, and compliance. An entrepreneurial program manager thinks in terms of small, empowered, outcome-focused squads aligned to value streams.

Typical Roles in a Multidisciplinary AI Program

- Program Manager (entrepreneurial lead): orchestrates strategy, governance, and delivery across all workstreams.
- Product Owner / Business Lead: owns value proposition, user journeys, and prioritization.
- Data Scientists / ML Engineers: develop, validate, and maintain AI models.
- Data Engineers: build and maintain data pipelines, feature stores, and data quality monitoring.
- Software Engineers / MLOps Engineers: integrate models into applications and orchestrate deployment, monitoring, and rollback.

- Enterprise and Solution Architects: ensure coherence with the broader IT landscape.
- Security and Privacy Specialists: align with AVG (GDPR), NEN 7510, ISO 27001, and internal standards.
- Compliance and Legal Experts: interpret EU AI Act requirements and sector-specific rules.
- Change & Adoption Leads: drive communication, training, and behavior change.
- Innovation Partners / Vendors: provide platforms, models, and specialized services.

The entrepreneurial program manager structures teams and ceremonies to keep these roles aligned around shared outcomes, not silos or functional boundaries.

5. Delivery Approach: Combining Scrum, Agile, and Waterfall

AI programs benefit from a hybrid delivery model that takes the best of Scrum, Agile, and Waterfall:

Waterfall Elements

- Strategic alignment, initial business case, and funding approvals.
- High-level architecture, security and compliance requirements definition.
- Major regulatory and go-live milestones (e.g., AI Act assessments, security accreditation, data protection impact assessments).

Agile and Scrum Elements

- Cross-functional squads working in sprints, with clear sprint goals linked to program KPIs.
- Backlog management with continuous reprioritization as learning emerges from experiments and pilots.
- Regular demos to stakeholders, enabling early feedback on AI model performance and usability.
- Retrospectives to improve ways of working, including compliance and risk management practices.

The entrepreneurial program manager is comfortable operating within this hybrid model: respecting hard constraints (regulation, security, critical go-live dates) while maximizing learning speed within those boundaries.

6. Compliance and Risk Management: AI Act, AVG, and NEN 7510 / ISO 27001

Compliance is not a side activity in AI programs; it is a design constraint. The entrepreneurial program manager uses compliance as a driver of quality and trust.

EU AI Act

- Classify AI systems according to risk categories (unacceptable, high-risk, limited risk, minimal risk). Mission-critical systems are often high-risk.

- Ensure required documentation: technical documentation, risk management files, data governance documentation, logging and monitoring records.
- Implement transparency, human oversight, robustness, and accuracy requirements as part of the design and acceptance criteria.

AVG (GDPR)

- Ensure lawfulness, fairness, and transparency in all personal data processing activities.
- Conduct Data Protection Impact Assessments (DPIA) for high-risk processing, especially automated decision-making or profiling.
- Adopt data minimization, purpose limitation, and storage limitation principles in data design.
- Embed data subject rights handling (access, rectification, erasure, objection) into processes and systems.

NEN 7510 and ISO 27001

- Treat information security as integral to AI solution design: confidentiality, integrity, and availability.
- Align AI infrastructure, data pipelines, and platforms with organizational ISMS controls.
- Ensure suppliers and cloud providers meet equivalent security standards and are covered by appropriate contractual clauses.

The entrepreneurial program manager does not see these frameworks as obstacles, but as tools to:

- Increase stakeholder trust and reduce political risk.
- Differentiate the organization by demonstrating responsible AI and data stewardship.
- Prevent costly rework, incidents, and program delays.

7. The Advantage of a Software Entrepreneur and Procurement-Aware Background

A program manager with a background as a software entrepreneur brings several distinct advantages to AI programs, especially when combined with supply chain and procurement experience.

Entrepreneurial Advantages

- Value orientation: constant focus on outcomes, customer (user) needs, and return on investment.
- Bias to action: ability to move from analysis to experimentation quickly, testing hypotheses in real environments.
- Resilience: comfort with setbacks, failed experiments, and pivoting without losing sight of the mission.

- Storytelling: skill in framing a compelling vision to secure stakeholder buy-in and continued funding.

Supply Chain and Procurement Strengths

- Vendor strategy: structuring the vendor ecosystem (platform providers, AI specialists, integrators) to avoid lock-in and preserve strategic options.
- Negotiation: securing favorable terms, SLAs, data ownership, IP, and exit clauses that protect the organization.
- Risk distribution: balancing in-house development with third-party services to manage delivery and operational risks.
- Scalability: designing contracts and supplier relationships that can scale with adoption and global rollout.

Together, entrepreneurial and procurement skills enable the program manager to design a delivery model that is both innovative and robust, maximizing the probability of sustainable success.

8. Toolkit for Managing Multidisciplinary AI Programs

Below is a practical toolkit that a program manager can use to steer a complex, multidisciplinary AI program.

8.1 Governance and Operating Model Toolkit

- RACI matrices for key decisions (use case selection, vendor choice, go/no-go for pilots, production releases).
- Standardized charters for AI use cases, including value hypothesis, risk classification (AI Act), and data needs.
- Templates for Steering Committee packs: status, risk/issue log, KPI dashboard, and decision requests.

8.2 Data Science and Engineering Toolkit

- Experiment tracking tools and conventions (e.g., run metadata, datasets, metrics, and model versions).
- Data quality and lineage dashboards for critical datasets.
- MLOps pipelines for CI/CD of models, including automated tests, bias checks, and rollback procedures.

8.3 Business and Change Toolkit

- Stakeholder maps identifying sponsors, champions, blockers, and impacted groups.
- Communication plans, including narratives tailored to executives, end-users, and control functions.
- Training and enablement materials focused on how AI changes day-to-day tasks and decision-making.

8.4 Compliance and Security Toolkit

- Standard DPIA templates incorporating AI-specific questions.
- Checklists for AI Act risk classification and required controls per category.
- Security control catalog aligned with NEN 7510 / ISO 27001, mapped to AI infrastructure components.

8.5 Vendor and Partner Toolkit

- Vendor selection scorecards (technical fit, data governance, compliance posture, financial stability, cultural fit).
- Contractual clause library covering data ownership, IP, model retraining, audit rights, and exit strategies.
- Joint innovation frameworks with partners, including co-creation governance and shared KPIs.

9. Entrepreneurial Contribution to Team Spirit and Stretch Targets

Entrepreneurial experience naturally shapes how a program manager builds and sustains team spirit. Having lived through the intensity of startup environments, they understand the importance of motivation, psychological safety, and shared purpose.

- Setting an inspiring mission: framing the AI program as a meaningful transformation, not just a technology rollout.
- Using stretch targets carefully: ambitious but credible goals that stimulate creativity without causing burnout.
- Celebrating learning, not only success: recognizing experiments that disproved hypotheses but generated valuable insight.
- Creating ownership: giving teams end-to-end responsibility for value outcomes, not just tasks.
- Protecting the team from unnecessary bureaucracy while still honoring compliance and governance needs.

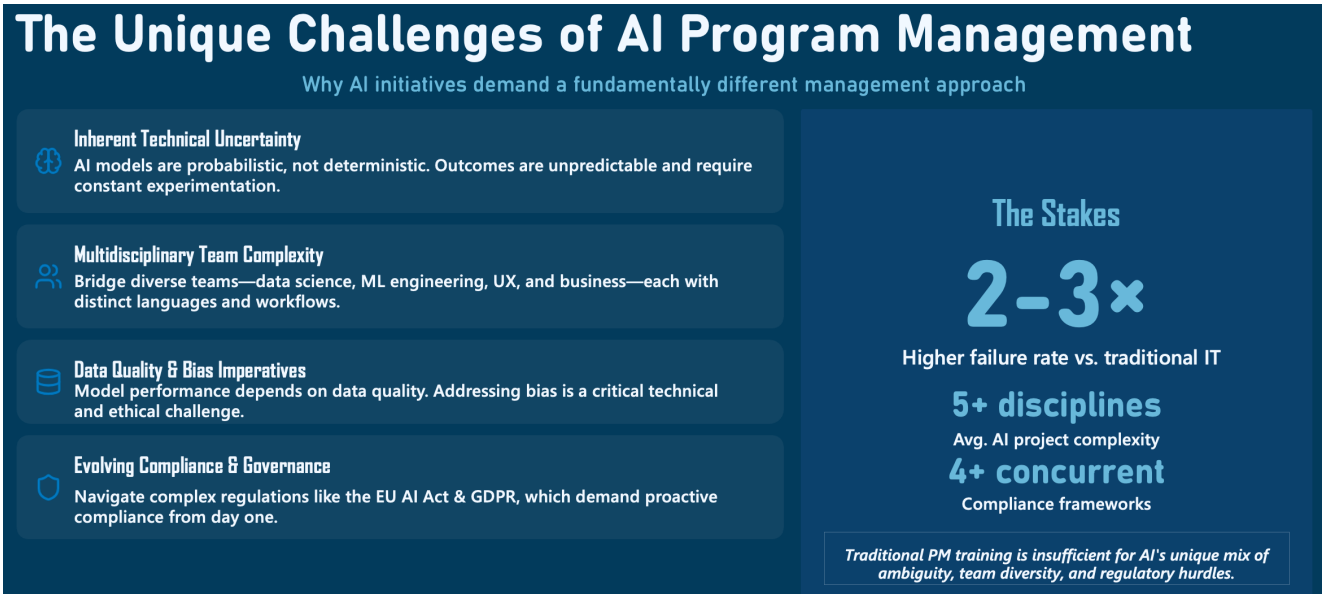
This leadership style encourages team members to go the extra mile, engage proactively with problems, and collaborate across disciplines—exactly what is required for complex AI programs under stretch objectives.

Conclusion

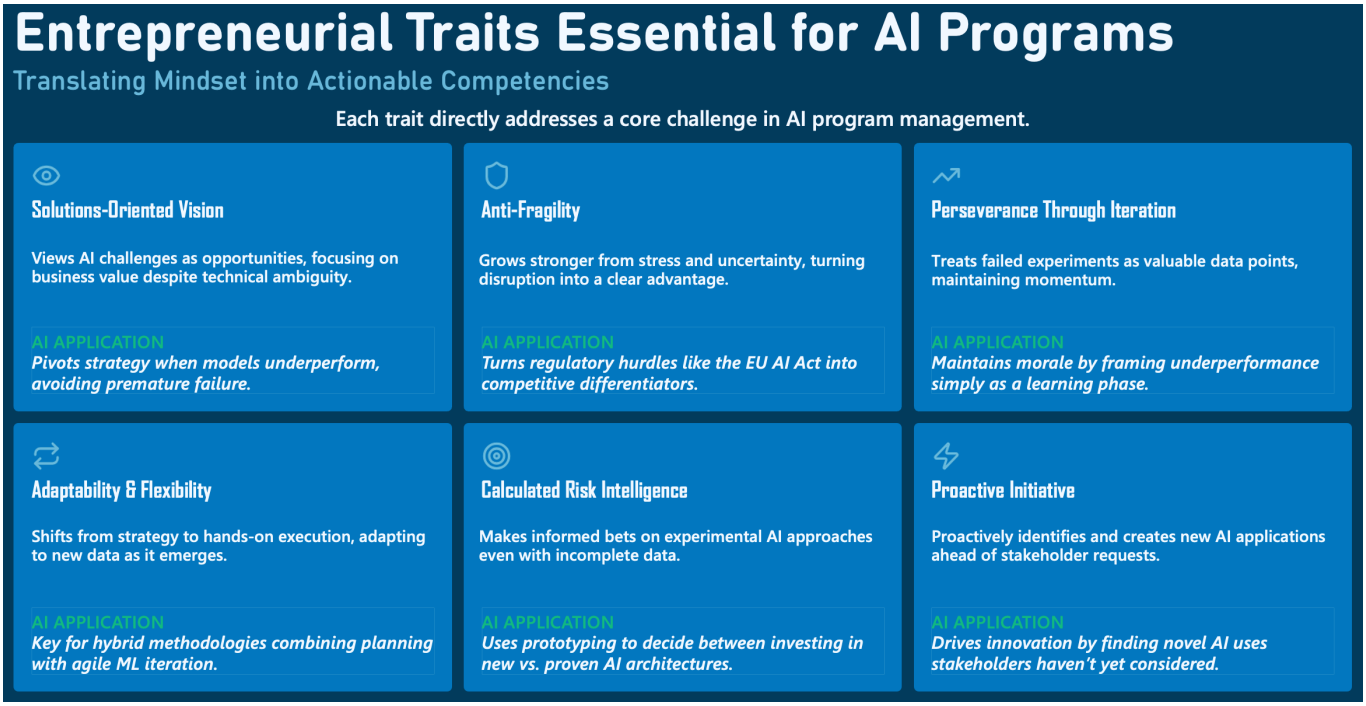
AI programs that seek to transform core processes, launch AI-native capabilities, or combine both cannot be run as traditional, linear projects. They are entrepreneurial endeavors inside established organizations. For such initiatives—where deliverables are ambitious and mission-critical—the optimal background for a program manager is often that of a software entrepreneur with a strong grasp of governance, compliance, multidisciplinary collaboration, and vendor ecosystems.

By combining entrepreneurial mindset, hybrid delivery methods (Scrum, Agile, Waterfall), and solid understanding of compliance frameworks (EU AI Act, AVG, NEN 7510 / ISO 27001), program managers can significantly increase the chances of success, deliver sustainable business value, and cultivate a motivated, high-performing team ready to achieve stretch targets.

APPENDIX A


The Unique Challenges of AI Program Management
Why AI initiatives demand a fundamentally different management approach
Inherent Technical Uncertainty
AI models are probabilistic, not deterministic. Outcomes are unpredictable and require constant experimentation.
Multidisciplinary Team Complexity
Bridge diverse teams—data science, ML engineering, UX, and business—each with distinct languages and workflows.
Data Quality & Bias Imperatives
Model performance depends on data quality. Addressing bias is a critical technical and ethical challenge.
Evolving Compliance & Governance
Navigate complex regulations like the EU AI Act & GDPR, which demand proactive compliance from day one.
The Stakes
2–3×
Higher failure rate vs. traditional IT
5+ disciplines
Avg. AI project complexity
4+ concurrent
Compliance frameworks
Traditional PM training is insufficient for AI's unique mix of ambiguity, team diversity, and regulatory hurdles.

APPENDIX B


Entrepreneurial Traits Essential for AI Programs
Translating Mindset into Actionable Competencies
Each trait directly addresses a core challenge in AI program management.
Solutions-Oriented Vision
Views AI challenges as opportunities, focusing on business value despite technical ambiguity.
AI APPLICATION
Pivots strategy when models underperform, avoiding premature failure.
Anti-Fragility
Grows stronger from stress and uncertainty, turning disruption into a clear advantage.
AI APPLICATION
Turns regulatory hurdles like the EU AI Act into competitive differentiators.
Perseverance Through Iteration
Treats failed experiments as valuable data points, maintaining momentum.
AI APPLICATION
Maintains morale by framing underperformance simply as a learning phase.
Adaptability & Flexibility
Shifts from strategy to hands-on execution, adapting to new data as it emerges.
AI APPLICATION
Key for hybrid methodologies combining planning with agile ML iteration.
Calculated Risk Intelligence
Makes informed bets on experimental AI approaches even with incomplete data.
AI APPLICATION
Uses prototyping to decide between investing in new vs. proven AI architectures.
Proactive Initiative
Proactively identifies and creates new AI applications ahead of stakeholder requests.
AI APPLICATION
Drives innovation by finding novel AI uses stakeholders haven't yet considered.