Leadership with AI

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Program Overview

AI is no longer a standalone technology initiative. It is becoming central to how organizations work, compete, innovate, and transform. This program is designed for practitioners, managers, and leaders who want a structured and implementation-oriented understanding of AI - from digital foundations and core AI (from classical to agentic AI) concepts to tools, platforms, strategy, leadership, and transformation. It goes beyond Generative AI to cover the broader AI spectrum, including classical AI, machine learning, deep learning, and Agentic AI, while keeping the focus firmly on practical business relevance.

Flow of modules: **Digital foundations → AI foundations → Tools → Leadership Strategies → Business Use-cases and Case Studies→ Capstone Project**

1. Digital Foundations for AI-Ready Organizations
2. The AI Spectrum — From Classical AI to Agentic AI
3. Tools, Platforms and Practical AI Enablement
4. AI Strategy, Leadership and Transformation
5. Business Case Studies on AI
6. Capstone: AI Leadership Project

Each session is approximately 3 hours of classroom live teaching and engagement with faculty. Total around 50 hours overall. 15 live sessions and 6 hours of final project presentations. There are extra Q&A sessions too.

Preparatory Session: IS/IT 101 (optional)

No. of Sessions: 1

Description

This session offers a practical introduction to Information Systems and Information Technology for non-IT practitioners. It helps participants build familiarity with the core concepts, technologies, and terminology that underpin modern digital organizations. Covering areas such as infrastructure, data, software, enterprise systems, analytics, security, emerging technologies, technology stacks, and IT investment, the session prepares participants to engage more meaningfully with the technology and AI-focused components of the program.

Objective

To build foundational IS/IT literacy among non-IT participants so that they can better understand technology-enabled organizations, engage with digital and AI concepts more confidently, and participate effectively in discussions throughout the Leadership with AI program.

Topics

- Introduction Information Systems/Technology
- Computing Infrastructures and architectures
- Data modelling, data management and data management systems/technologies
- Understanding software and software development
- Enterprise systems, eCommerce and payment systems
- Business Intelligence/Analytics and AI/ML
- IoT, AR/VR, Digital twins
- IT/IS Security and Security Technologies
- Technology/Solution Stacks
- Investing in IT

Outcomes

Participants will leave the session with:

- a working familiarity with key IS/IT terms and concepts
- a clearer understanding of how major technology components support business processes and digital transformation
- improved confidence in engaging with technology-oriented discussions in the rest of the program
- a stronger appreciation of the managerial relevance of IT, data, software, analytics, security, and emerging digital technologies

Module 1: Digital Foundations for AI-Ready Organizations

No. of Sessions: 2

Description

AI cannot deliver value in isolation. For AI to work at scale, organizations need the right digital foundations: data, systems, integration layers, infrastructure, and security. This module helps participants understand the broader technology context within which AI initiatives succeed or fail. It introduces the enterprise technology stack and explains how AI, IoT, cloud, and data come together in modern digital transformation.

Objective

To help participants understand the digital building blocks required to make organizations AI-ready, and to appreciate how AI must be integrated with enterprise systems, workflows, data, and security architecture.

Session 1: The Digital Enterprise Context for AI

Topics

- Enterprise information systems and digital technologies
- Evolution of digital technologies and the changing landscape
- The role of AI, IoT, Cloud, and Data in digital transformation
- Why AI must be connected to business processes and enterprise systems

Learning Outcomes

By the end of this session, participants will be able to:

- explain why AI cannot be implemented effectively in silos
- describe the broader digital context within which AI operates
- identify the role of data, cloud, and connected systems in AI-led transformation
- recognize what makes an organization ready for AI adoption

Session 2: Integration, Automation and Security Foundations

Topics

- Computing infrastructure and data management systems
- APIs, microservices, orchestration, and interoperability
- Foundations of end-to-end automation
- Securing digital systems for AI-enabled organizations

Learning Outcomes

By the end of this session, participants will be able to:

- understand the role of infrastructure and integration in enterprise AI
- distinguish key components of AI-enabling technology architecture
- appreciate the importance of automation readiness
- identify major security, privacy, and resilience considerations in AI adoption

Module 2: The AI Spectrum — From Classical AI to Agentic AI

No. of Sessions: 4

Description

This module provides a structured and holistic understanding of AI. It moves from the foundations of intelligence and problem solving to classical AI, machine learning, deep learning, Generative AI, and Agentic AI. A distinctive feature of this module is its emphasis on understanding the differences between AI paradigms, when each is appropriate, and how they can be combined in practice.

Objective

To help participants build a strong conceptual foundation in AI and understand the practical differences, complementarities, and use-cases of classical AI, machine learning, Generative AI, and Agentic AI.

Session 1: Understanding AI, Intelligence and Problem Solving

Topics

- What is AI and how it evolved
- Defining intelligence in organizational and business settings
- Role of data, data modelling, metadata, modelling generic entities, structuring knowledge using knowledge graphs, ontologies and similarities, data modelling for highly personalized and contextual intelligence
- Data-driven, knowledge-driven, operational, and common-sense intelligence
- Machine learning: supervised, unsupervised, reinforcement, and evolutionary computing approaches
- Understanding semantic AI, data driven AI/ML, Generative AI and Agentic AI.

Learning Outcomes

By the end of this session, participants will be able to:

- explain the evolution and meaning of AI in business terms
- distinguish different forms of intelligence relevant to organizations
- understand how AI supports problem solving and decision making
- understand role of data, metadata, semantic AI in building intelligence

Session 2: Generic problems and applications, core AI/ML techniques/algorithms

Topics

- Role of AI/ML in building intelligent systems
- Generic problem types AI/ML solves: classification, clustering, regression, intelligent matching, recommender systems, association rule mining, optimization etc.
- N=1 analysis for highly personalized experiences
- How generic applications can be built using AI/ML such as forecasting, sentiment analysis, segmentation, market-basket analysis, personalization and recommendation etc.
- Understanding techniques behind: ML techniques, case-based reasoning, expert systems, genetic algorithms, model-based reasoning, collaborative and content filtering.
- Integrating various systems to solve problems more effectively with 360-degree view.
- Business applications of AI/ML and how AI/ML can be used to address use-cases in different domains.

Learning Outcomes

By the end of this session, participants will be able to:

- explain the basic families of machine learning methods and how they differ
- understand different generic problems AI/ML models and solves and connect to the real-world use-cases in respective domains.
- how semantic (knowledge) based intelligence and data driven intelligence can be integrated
- assess when rule-based, semantic, and ML approaches are more suitable

Session 3: Deep Learning and Generative AI

Topics

- Problem complexity and neural networks
- Deep learning fundamentals

- Foundations and capabilities of Generative AI
- Multimodal AI
- RAG, fine-tuning, prompt engineering, and context engineering
- Leveraging classical AI using Generative AI
- Limitations, risks, and mitigation

Learning Outcomes

By the end of this session, participants will be able to:

- understand where deep learning becomes relevant
- explain the business significance of Generative AI
- distinguish prompt engineering, context engineering, RAG, and fine-tuning
- identify key risks such as hallucinations and inappropriate outputs

Session 4: Agentic AI and Combining AI Approaches

Topics

- Leveraging classical AI, ML, and GenAI together
- Operationalising AI in business workflows
- AI agents and Agentic AI
- End-to-end automation and human-in-the-loop considerations

Learning Outcomes

By the end of this session, participants will be able to:

- explain what Agentic AI is and how it differs from other AI approaches
- understand how multiple AI paradigms can work together
- identify where agents can add value in enterprise contexts
- appreciate the importance of oversight, orchestration, and human judgment

Module 3: Tools, Platforms and Practical AI Enablement

No. of Sessions: 2

Description

Beyond conceptual understanding, leaders and practitioners need familiarity with the rapidly evolving ecosystem of AI tools, frameworks, platforms, and implementation approaches. This module focuses on practical enablement: improving personal productivity, office productivity, reimagining application development, integrating AI into existing solutions, and understanding how tools and platforms support enterprise AI initiatives.

Objective

To help participants understand the AI tool landscape and evaluate how tools, platforms, and development approaches can be used to enhance productivity, accelerate innovation, and implement AI-enabled solutions.

Representative AI tools/frameworks/languages:

Purpose	Link
ML/AI programming languages	Python, R, various AI/ML Libraries
Powerful presentations	https://gamma.app/, https://www.genspark.ai/
Research	https://scispace.com/
Project management	https://www.usemotion.com/
Data Analytics	https://julius.ai/, https://www.airtable.com/
Microsoft CoPilot	https://www.microsoft.com/en/microsoft-365-copilot
No Code Agent Framework	https://n8n.io/ https://www.langflow.org/
Generic tools and languages	Gemini (e.g. nano-banana, Veo 3.1, etc.), ChatGPT (Sora, DALL-E, etc.), Anthropic (Claude Code, Claude Cowork, etc.), Perplexity, Python, etc.

Session 1: AI Tools, Prompting and Productivity

Topics

- AI tools, languages, frameworks, and platforms
- Prompt engineering and context engineering in practice
- Personal and office productivity enhancement
- Practical uses of AI for drafting, analysis, summarization, ideation, and decision support

Learning Outcomes

By the end of this session, participants will be able to:

- navigate the broad landscape of AI tools and platforms
- use prompt engineering more effectively for practical work
- identify high-value productivity use-cases for AI
- understand how AI can augment everyday knowledge work

Session 2: Platforms, App Development and Enterprise Integration

Topics

- Reimagining software and app development using AI
- Integrating AI into existing solutions
- Building AI-enabled workflows and assistants
- AI agents and end-to-end AI solution development
- Platform choices: no-code, low-code, and custom approaches

Learning Outcomes

By the end of this session, participants will be able to:

- understand how AI is changing application development and management
- evaluate different implementation pathways for AI solutions
- appreciate the role of integration in enterprise adoption
- assess when no-code, low-code, or custom development is most appropriate

Module 4: AI Strategy, Leadership and Transformation

No. of Sessions: 3

Module Description

This module focuses on the leadership challenge of AI: identifying high-value opportunities, shaping strategy, building capabilities, driving adoption, managing change, choosing implementation pathways, and scaling responsibly. It helps participants move from understanding AI to leading AI-led transformation in their organizations.

Module Objective

To equip participants with the strategic, organizational, and leadership perspectives needed to identify, prioritize, implement, govern, and scale AI initiatives in real business settings.

Session 1: Identifying AI Opportunities and Designing Strategy

Topics

- Understanding AI use-cases
- Integrating AI into existing systems and processes
- AI-ready data foundations
- Building systems as part of digitalization initiatives
- Responsible, ethical, and governed use of AI
- Security, regulatory and compliance considerations

Learning Outcomes

By the end of this session, participants will be able to:

- identify and prioritize suitable AI use-cases
- understand how AI fits into business processes and digital initiatives

- appreciate the role of data readiness in successful implementation
- incorporate ethics, governance, and compliance into AI strategy

Session 2: Leading AI-Driven Organizational Change

Topics

- What it means to be an AI-ready organization
- AI-first leadership
- Technical understanding required for leaders
- Talent, capability building, and cross-functional collaboration
- Change management and scaling AI across the organization

Learning Outcomes

By the end of this session, participants will be able to:

- explain the organizational capabilities needed for AI readiness
- understand the role of leadership in driving AI-led change
- identify talent and capability requirements for AI initiatives
- recognize the main change management challenges in AI adoption

Session 3: Scaling AI — Business Models, Build-vs-Buy and Execution

Topics

- Agentic AI and implications for business models
- Strategic positioning and differentiation in the AI era
- Prototyping, rapid proof of concept, scoping, and success gates
- Build-vs-buy playbook
- Token economy and AI economics
- Industry frameworks for implementation and scale-up

Learning Outcomes

By the end of this session, participants will be able to:

- understand how AI may reshape business models and strategic choices
- evaluate build-vs-buy decisions more effectively
- use prototyping and success gates to reduce implementation risk
- appreciate the economics and scaling considerations of AI initiatives

Module 5: Business Case Studies* and Use-cases on AI

No. of Sessions: 4

Description

This module brings the program to life through real-world business cases on AI adoption, transformation, innovation, and strategic execution. It helps participants examine how organizations across sectors have approached AI, what strategies and roadmaps they followed, what outcomes they achieved, what challenges they faced, and why some initiatives succeeded while others struggled. The module is designed to connect leadership frameworks with actual implementation journeys and business results.

*Mostly these case studies would be from Harvard Business Impact Education. Cases will be selected based on concentration of verticals participants belong to and the choices based on the survey.

Objective

To help participants understand how organizations across the world are leveraging AI in practice, including the strategic choices they made, the implementation pathways they followed, the value they realized, the risks and barriers they encountered, and the lessons leaders can draw for their own organizations.

Overall Learning Outcomes for Module

By the end of this module, participants will be able to:

- interpret AI case studies using a leadership and strategy lens

- connect AI concepts, tools, and frameworks from earlier modules to real business situations
- assess AI initiatives in terms of strategy, implementation, governance, ROI, and scalability
- identify best practices for AI adoption and transformation
- recognize warning signs, pitfalls, and failure patterns in AI programs
- derive practical lessons for designing and leading AI initiatives in their own context

Module 6: Capstone Project — AI Leadership in Action

Presentations: No. of Sessions: 2

Parallel project across the program with final presentation at the end. 1 final presentation session + guided milestone reviews during the program. Approximate hours for all presentations: 6 hours (based on selected projects).

Description

The capstone project is the culminating component of the program. It is designed to help participants apply the concepts, frameworks, tools, and leadership perspectives covered across the earlier modules to a real organizational problem or opportunity. Participants will identify a business challenge, evaluate how AI can create value, choose an appropriate AI approach, and develop a practical implementation roadmap. The capstone extends the program's focus on AI-ready organizations, AI use-cases, tools and platforms, build-vs-buy decisions, governance, and business transformation.

Objective

To enable participants to synthesize learning from the program and translate it into a practical AI initiative, transformation proposal, or solution blueprint relevant to their organization, industry, or chosen domain.

Capstone Purpose

The capstone is intended to move participants from understanding AI concepts to applying them in a structured, leadership-oriented manner. It should help them demonstrate not only knowledge of AI, but also judgment on where AI fits, which approach is suitable, what organizational readiness is required, and how implementation can be governed and scaled. This fits naturally with program's emphasis on digital foundations, the AI spectrum, practical enablement, and AI-led transformation.

Capstone Format

Participants may work individually or in small teams. Each participant or team should select one real or realistic problem statement from their organization, function, sector, or an assigned industry context. The capstone may be developed progressively across the program in the following way:

- after the early modules, define the business problem and current context
- after the AI foundations module, identify the suitable AI approach or mix of approaches
- after the tools/platforms module, outline the solution pathway and implementation choices
- after the leadership module, complete the strategy, governance, change, and scaling plan
- after the case-study module, refine the proposal using lessons from real-world implementations

Capstone Themes

The project may focus on one of the following:

1. AI-led process improvement
2. Productivity enhancement using AI
3. Customer experience transformation
4. AI-enabled decision support
5. Domain-specific AI solution design
6. AI agent or workflow automation concept
7. Enterprise AI adoption roadmap
8. Responsible AI and governance framework for a business function

Deliverables

Each participant or team may be asked to submit the following (through google form/app):

1. Problem Statement: A clear articulation of the business problem, pain point, or opportunity.
2. Current-State Assessment: A brief description of the current process, system, decision flow, or business context.
3. AI Opportunity Identification: Explanation of where AI can help and why the problem is appropriate for AI.
4. Recommended AI Approach: Selection of the most suitable approach, such as classical AI, machine learning, Generative AI, Agentic AI, or a hybrid model.
5. Data and Technology Readiness View: Key requirements related to data, systems, integration, platforms, and enterprise readiness.
6. Solution Blueprint: A conceptual design of the proposed AI-enabled solution, workflow, assistant, or transformation initiative.
7. Implementation Roadmap: Suggested phases, milestones, pilots, proof-of-concept stages, and scale-up approach.
8. Governance and Risk Considerations: Key ethical, regulatory, privacy, security, and oversight considerations.
9. Value Realization Framework: Expected benefits, KPIs, ROI logic, or success metrics.
10. Final Presentation: A concise presentation summarizing the capstone proposal and recommendations.

Expected Outcome

At the end of the capstone, participants should be able to present a practical and leadership-oriented answer to these questions:

1. What business problem are we solving?
2. Why is AI relevant here?
3. Which type of AI is most appropriate?
4. What digital and data foundations are needed?
5. Should we build, buy, or partner?
6. What are the implementation risks?
7. How will we measure success?
8. What is the roadmap for execution and scale?

Evaluation Criteria

1. Relevance of the Business Problem: How clearly the participant identifies a meaningful and realistic business challenge.
2. Appropriateness of the AI Approach: How well the chosen AI paradigm matches the nature of the problem.
3. Practicality of the Solution Design: Whether the proposal is realistic in terms of data, systems, integration, tools, and organizational context.
4. Strategic and Leadership Quality: How well the participant addresses adoption, change management, governance, talent, and implementation decisions.
5. Governance and Risk Awareness: Whether the proposal adequately considers ethics, regulation, privacy, security, and human oversight.
6. Value Creation Logic: How clearly the participant defines expected impact, metrics, business value, and success criteria.
7. Clarity of Communication: How effectively the participant presents the problem, solution, roadmap, and expected outcomes.

Group formation

1. Group of 5-12 participants aligned based on interest, job profile and current role or role to be played.
2. Choosing the project
    - Vertical: Banking, finance, insurance, manufacturing, agriculture, healthcare, education, government etc.
    - Function: HR, Marketing, Finance and Accounting, Logistics etc.
    - Specific use case: e.g. insurance underwriting, end-to-end recruitment automation using agentic AI, marketing automation in specific vertical or in general.
3. Have a mix of business leaders, domain & technical experts (with CS/IT background) etc.

Setting expectations right

Participants are expected to learn enough to ask the right questions, identify the right use cases, understand risks and limitations, and lead AI initiatives responsibly.

Note:

- Not a hands-on tool lab
- Not a prompt engineering course
- Not ML/AI engineer training

Understand AI at the core

What AI is, where different types of AI fit, how to use AI wisely, and where limitations, uncertainty, hallucinations, governance, and data readiness matter. No theory! focus is on concepts, techniques, generic applications, possible-use-cases in more applied way with examples.

Shifting mental model

AI is a different category of technology different than used so far: less deterministic, more probabilistic, context-dependent, data-driven, multi-modal and increasingly shaped by token economy considerations.

Use tool demos as capability exposure

Tools and platforms are demonstrated to show what is possible and how such capabilities work in practice. Participants can explore hands-on usage independently after the sessions.

Apply the learning across roles, functions, and sectors *

The program is not function-specific or vertical-specific. Like Excel, AI capabilities can be adapted to finance, HR, marketing, operations, BFSI, manufacturing, government, and more. As part of case-studies, assignments and capstone, the participant can explore possibilities.

* Cases/use-cases/assignments will be selected based on concentration of verticals participants belong to and the choices they have.