

Training Course on Machine Learning for Non-Technical Leaders

Professional Development Training Course Outline

Category	CEOs and Directors	Duration	10 Days
Base Fee	\$3,000 USD	Delivery Mode	Online / On-site Hybrid

Course Introduction

In today's rapidly evolving digital landscape, **Machine Learning (ML)** is no longer a niche technical domain but a core driver of **business innovation** and **strategic advantage**. Non-technical leaders who grasp the fundamental concepts and practical applications of ML are uniquely positioned to **transform their organizations**, identify **new opportunities**, and navigate the complexities of data-driven decision-making. This course demystifies ML, equipping executives, managers, and strategists with the **literacy and foresight** needed to effectively lead ML initiatives without requiring deep coding knowledge.

Training Course on Machine Learning for Non-Technical Leaders focuses on bridging the gap between cutting-edge ML technology and its **real-world business impact**. Participants will gain a clear understanding of what ML can (and cannot) do, learn to articulate **data-driven strategies**, and effectively communicate with **technical teams**. By developing a strategic perspective on **AI adoption** and **digital transformation**, non-technical leaders will unlock their organization's full potential, fostering a culture of innovation and informed decision-making in the age of intelligent automation.

Programme Curriculum

Training Course on Machine Learning for Non-Technical Leaders

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10 days

Course Objectives

1. Gain a clear, jargon-free understanding of fundamental **Artificial Intelligence (AI)** and **Machine Learning (ML)** principles.
2. Learn to identify and articulate **strategic opportunities** for **ML adoption** across various business functions.
3. Enhance capabilities in leveraging **data insights** and **predictive analytics** for informed business decisions.
4. Explore the power of **accessible ML tools** and **automation workflows** for rapid prototyping and deployment.
5. Understand the critical importance of **AI ethics**, **bias mitigation**, and responsible **data governance** in ML projects.
6. Bridge the gap between **business objectives** and **technical execution** by effectively collaborating with data science teams.
7. Develop frameworks to assess and demonstrate the **Return on Investment (ROI)** of **Machine Learning initiatives**.
8. Grasp the core concepts of **predictive modeling**, **classification**, and **regression** without technical depth.
9. Learn to develop a practical **AI transformation strategy** for organizational growth and efficiency.
10. Identify common **AI pitfalls** and develop strategies for **risk management** in ML deployments.
11. Explore the emerging landscape of **Generative AI** and its potential for content creation and business innovation.
12. Equip yourself with the mindset and knowledge to lead effectively in an increasingly **AI-driven future**.
13. Foster an organizational culture that embraces **continuous learning** and **AI literacy**.

Organizational Benefits

- Organizations can swiftly adapt to market changes by leveraging ML-driven insights.
- Automation of routine tasks and optimized processes lead to significant cost savings.
- Personalized services and targeted offerings driven by ML lead to increased customer satisfaction and loyalty.
- Early and effective adoption of ML differentiates businesses in the marketplace.
- Fosters a culture where data fuels new product development and service enhancements.
- Better forecasting and predictive analytics enable more efficient use of resources.

- ML models can identify anomalies and potential fraud more effectively than traditional methods.
- Data-backed insights support smarter capital allocation and strategic investments.

Target Audience

1. Senior Executives and C-Suite Leaders.
2. Department Heads and Managers
3. Business Analysts & Consultants.
4. Project Managers.
5. Entrepreneurs & Startup Founders
6. Decision-Makers in Any Industry.
7. Non-Technical Innovators.
8. Team Leaders & Supervisors.

Course Outline

Module 1: Introduction to Machine Learning for Business Leaders

- What is Machine Learning (ML) and why is it crucial for business?
- Demystifying AI vs. ML vs. Deep Learning: Core concepts explained simply.
- The business value proposition of ML: Beyond the hype.
- Understanding common ML applications in various industries.
- **Case Study:** How Netflix uses ML for personalized recommendations, driving customer engagement and retention.

Module 2: The ML Project Lifecycle from a Non-Technical Perspective

- Key stages: Problem definition, data acquisition, model development, deployment, monitoring.
- Understanding the roles of data scientists, engineers, and business stakeholders.
- Framing business problems as ML opportunities.
- Agile methodologies in ML project management.
- **Case Study:** A retail company optimizing inventory management using ML forecasting, reducing waste and improving stock availability.

Module 3: Data Fundamentals for Leaders

- The importance of data quality, quantity, and ethical sourcing.
- Understanding different types of data: Structured, unstructured, big data.
- Data literacy: Asking the right questions about data.
- Data governance and privacy considerations (e.g., GDPR, CCPA).
- **Case Study:** A healthcare provider leveraging anonymized patient data for predictive disease diagnosis, enhancing early intervention.

Module 4: Supervised Learning: Predicting the Future

- Introduction to supervised learning: Learning from labeled data.
- Common algorithms: Regression (predicting continuous values) and Classification (predicting categories).
- Key metrics for evaluating supervised models (e.g., accuracy, precision, recall).
- Understanding overfitting and underfitting without the math.

- **Case Study:** A financial institution using ML for fraud detection, minimizing financial losses and enhancing security.

Module 5: Unsupervised Learning: Discovering Hidden Patterns

- Introduction to unsupervised learning: Finding patterns in unlabeled data.
- Clustering: Grouping similar data points for segmentation.
- Dimensionality Reduction: Simplifying complex datasets for better insights.
- Applications in customer segmentation and anomaly detection.
- **Case Study:** An e-commerce platform segmenting its customer base for targeted marketing campaigns, increasing conversion rates.

Module 6: Ethical AI & Responsible Innovation

- Addressing bias in ML models and data.
- Fairness, accountability, and transparency (FAT) in AI.
- The societal impact of AI: Job displacement, privacy concerns.
- Developing an ethical AI framework for your organization.
- **Case Study:** Analyzing a real-world example of algorithmic bias in a hiring tool and discussing strategies for mitigation.

Module 7: Introduction to No-Code/Low-Code ML Platforms

- Empowering non-technical users with accessible ML tools.
- Drag-and-drop interfaces for model building and deployment.
- Rapid prototyping and iterative development.
- Evaluating and selecting appropriate no-code/low-code solutions.
- **Case Study:** A small business using Google AutoML to build a custom image recognition model for product categorization.

Module 8: Machine Learning in Practice: Business Use Cases

- Marketing & Sales: Customer churn prediction, lead scoring, personalization.
- Operations: Supply chain optimization, predictive maintenance.
- Finance: Credit risk assessment, algorithmic trading.
- HR: Talent acquisition, employee retention analysis.
- **Case Study:** An automotive manufacturer using ML for predictive maintenance of machinery, reducing downtime and costs.

Module 9: AI Strategy & Roadmapping for Leaders

- Developing an organizational AI vision and strategy.
- Identifying high-impact ML initiatives aligned with business goals.
- Building an AI-ready organizational structure.
- Measuring the ROI of ML projects: Key performance indicators.
- **Case Study:** A large enterprise developing a multi-year AI roadmap, outlining key investments and expected business outcomes.

Module 10: Communicating with Data Scientists and AI Teams

- Translating business problems into technical requirements.
- Effective communication strategies for cross-functional teams.
- Understanding the limitations and capabilities of ML models.
- Setting realistic expectations for AI project outcomes.

- **Case Study:** A business leader effectively collaborating with a data science team to refine a customer sentiment analysis model.

Module 11: The Future of AI: Emerging Trends & Technologies

- Generative AI: Revolutionizing content creation and design.
- Reinforcement Learning: Learning through trial and error.
- Edge AI: Processing data closer to the source.
- Quantum Machine Learning: The distant horizon.
- **Case Study:** Exploring how a media company is experimenting with Generative AI for automating content summaries and drafting marketing copy.

Module 12: Building an AI-Driven Culture

- Fostering AI literacy across the organization.
- Encouraging experimentation and learning from failures.
- Upskilling and reskilling the workforce for an AI-powered future.
- Promoting a data-first mindset.
- **Case Study:** A professional services firm implementing internal training programs and hackathons to promote AI awareness and innovation.

Module 13: Risk Management & AI Governance

- Identifying and mitigating risks associated with AI deployment (e.g., security, reliability).
- Establishing clear governance frameworks for AI initiatives.
- Compliance with industry regulations and standards.
- Developing incident response plans for AI system failures.
- **Case Study:** A financial services company implementing an AI governance committee to oversee ethical and compliant ML model deployment.

Module 14: AI in Your Industry: Tailored Applications

- Deep dive into industry-specific ML use cases (e.g., finance, healthcare, retail, manufacturing, logistics).
- Identifying direct competitors and industry leaders leveraging AI.
- Brainstorming immediate AI opportunities within participants' organizations.
- Group exercises on developing tailored AI solutions.
- **Case Study:** Participants work in groups to identify and outline a potential ML project relevant to their specific industry, including estimated ROI.

Module 15: Action Planning & Next Steps

- Developing a personal AI action plan.
- Resources for continuous learning and development.
- Networking with peers and AI experts.
- Q&A and open discussion on challenges and opportunities.
- **Case Study:** Individual participants present their initial AI action plans, receiving feedback and insights from instructors and peers.

Training Methodology

This course employs a **blended learning approach** designed specifically for non-technical leaders, emphasizing practical understanding and strategic application over technical details.

- **Interactive Lectures:** Engaging presentations that demystify complex ML concepts through analogies and real-world examples, avoiding technical jargon.
- **Case Study Analysis:** In-depth examination of successful and challenging ML implementations across diverse industries to illustrate concepts and best practices.
- **Group Discussions & Brainstorming:** Facilitated sessions encouraging peer learning, knowledge sharing, and collaborative problem-solving for business challenges.
- **Hands-on Demonstrations (No-Code/Low-Code Tools):** Visual walkthroughs and guided exercises using user-friendly ML platforms to provide practical exposure without coding.
- **Strategic Frameworks & Templates:** Provision of actionable tools and templates for developing AI strategies, evaluating projects, and managing risks.
- **Q&A and Expert Panel Sessions:** Opportunities to interact directly with experienced AI practitioners and industry leaders.
- **Action Planning Workshops:** Structured sessions to help participants translate learning into personalized strategic initiatives for their organizations.

Register as a group from 3 participants for a Discount

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Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

- The participant must be conversant with English.
- Upon completion of training the participant will be issued with an Authorized Training Certificate
- Course duration is flexible and the contents can be modified to fit any number of days.
- The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- One-year post-training support Consultation and Coaching provided after the course.
- Payment should be done at least a week before commence of the training, to DAT

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
21 Sep 2026	02 Oct 2026	Online	\$2,000
21 Sep 2026	02 Oct 2026	Physical	\$3,000
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0

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