



AI-DRIVEN STRATEGIC MANAGEMENT AND DECISION-MAKING TRAINING COURSE

REF: #AI56983503



COURSE INTRODUCTION / OVERVIEW:

Government and private organizations today are experiencing a fundamental shift in how strategies are formulated and decisions are made. Relying on personal experience and intuition alone is no longer enough to navigate a fast-changing, data-intensive, and risk-laden business environment. Artificial intelligence has become a strategic tool that enables leaders to read early indicators, anticipate future scenarios, and evaluate alternatives with greater accuracy and objectivity, while keeping human judgment at the center of decision-making and accountability. This training course builds on a deep understanding of the relationship between prediction and judgment, an idea presented by Ajay Agrawal, Joshua Gans, and Avi Goldfarb in their book *Prediction Machines: The Simple Economics of Artificial Intelligence*, which explains that AI lowers the cost of prediction, while the value of human judgment and priority setting remains in the hands of leadership. The course also draws on the work of Marco Iansiti and Karim Lakhani in *Competing in the Age of AI* on redesigning the organizational operating model around data and algorithms. BIG BEN Training Center offers this course through an integrated, practical approach that takes participants from understanding AI fundamentals in a management context, through AI-powered strategic analysis, data-driven decision support models, predictive analytics and strategic risk management, to responsible AI governance and building an organizational AI transformation roadmap. The course focuses on real-world application and case studies, enabling leaders to turn data into insights and insights into well-founded strategic decisions that strengthen competitiveness, sustainability, and organizational value.

TARGET AUDIENCE / THIS TRAINING COURSE IS SUITABLE FOR:

- Senior management members and executive leaders.
- Department directors and heads of divisions.
- Strategic planning managers and organizational performance officers.
- Digital transformation and innovation officers.
- Business analysts and data analysts involved in decision support.
- Project, program, and portfolio managers.
- Risk management, quality, and compliance officers.
- Management and strategy consultants.
- High-potential leaders preparing for supervisory roles.



TARGET SECTORS AND INDUSTRIES:

- Government agencies, ministries, semi-government entities, and their equivalents.
- Banking, financial services, and insurance.
- Oil, gas, energy, and utilities.
- Telecommunications and information technology.
- Healthcare and medical services.
- Education, universities, and research centers.
- Transportation, logistics, and supply chains.
- Retail, trade, and services.
- Industry and manufacturing.
- Real estate, construction, and infrastructure.

TARGET ORGANIZATIONS DEPARTMENTS:

- Strategic Planning.
- Digital Transformation and Innovation.
- Organizational Performance and Excellence.
- Information Technology and Data.
- Risk Management, Compliance, and Internal Audit.
- Finance and Financial Planning.
- Operations.
- Project Management and Project Management Offices.
- Human Resources and Talent Development.
- Executive Offices and Decision Support Units.



COURSE OFFERINGS:

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

- Understand the core concepts of artificial intelligence and machine learning and their applications in strategic management.
- Analyze the organization's internal and external environment using AI tools and data analytics.
- Distinguish between the role of machine prediction and the role of human judgment in strategic decision-making.
- Build simple data-driven and scenario-based decision support models.
- Apply predictive analytics to foresight and strategic risk management.
- Evaluate strategic options and prioritize initiatives using objective, data-supported methods.
- Identify cognitive and algorithmic biases and reduce their impact on decisions.
- Design an ethical and responsible governance framework for AI use in the organization.
- Link AI initiatives to strategic objectives and key performance indicators.
- Prepare a practical roadmap for integrating AI into the planning and decision-making system.

COURSE METHODOLOGY:

BIG BEN Training Center delivers this training course through an integrated, interactive methodology that combines conceptual depth with practical application, so that participants leave with a clear understanding and a real ability to use artificial intelligence in their work environment. Each unit begins with a focused presentation of modern concepts and frameworks, followed by guided discussions that connect these ideas to the actual challenges participants face in their organizations. Case studies play a central role, as participants analyze real examples of government and private organizations that have used AI in planning, forecasting, and decision-making, drawing lessons from both successes and failures. Participants also work in small teams on strategic decision simulations across multiple scenarios using sample data and simplified dashboards, strengthening analytical thinking, teamwork, and the exchange of experience. The course includes practical demonstrations of analytical tools and generative AI in preparing strategic analyses, with an emphasis on ways of thinking and asking the right questions rather than on the tools themselves. The trainer provides continuous individual and group feedback, reviews each day's outputs, and links them to the next session. Throughout the course, each participant gradually develops a mini roadmap for their own organization, which is presented and discussed on the final day, ensuring a practical outcome ready for immediate implementation.



COURSE AGENDA (COURSE UNITS):

UNIT ONE: ARTIFICIAL INTELLIGENCE AND THE TRANSFORMATION OF MODERN STRATEGIC MANAGEMENT

- AI, machine learning, and generative AI explained in simple management terms.
- The evolution of strategic thinking from traditional planning to data-driven strategy.
- The relationship between prediction and judgment in decision-making from the Prediction Machines perspective.
- Areas where AI can be applied in management and leadership functions.
- Real opportunities and limitations of AI in the organizational environment.
- Data and organizational infrastructure requirements for successful AI applications.
- The leader's role in the age of AI and the new leadership skills required.
- Case study: an organization that redesigned its operating model around data.

UNIT TWO: AI-POWERED STRATEGIC ENVIRONMENTAL ANALYSIS

- Using AI to analyze the external environment and monitor trends.
- Enhancing traditional tools such as SWOT and PESTEL with data and intelligent analytics.
- Analyzing competitors and markets using multiple data sources.
- Text and sentiment analysis to understand customer and stakeholder expectations.
- Detecting weak signals and early indicators of change.
- Using generative AI to prepare and review strategic analyses.
- Verifying output accuracy and data source quality.
- Practical exercise: preparing a data-supported strategic analysis for a sample organization.



UNIT THREE: DECISION SUPPORT MODELS AND STRATEGIC OPTION EVALUATION

- Stages of the strategic decision-making process and where AI can contribute.
- Descriptive, diagnostic, predictive, and prescriptive analytics.
- Building simple data-driven decision support models.
- Evaluating strategic alternatives using multiple criteria and objective weighting.
- Intelligent dashboards and their role in monitoring decisions.
- Cognitive biases in decision-making and how AI can reveal or amplify them.
- Balancing system recommendations, human judgment, and leadership accountability.
- Group simulation: making a strategic decision with conflicting data.

UNIT FOUR: FORECASTING, SCENARIOS, AND STRATEGIC RISK MANAGEMENT

- Predictive analytics and its applications in strategic planning.
- Building future scenarios with AI support.
- Sensitivity analysis and testing strategic assumptions.
- Using AI to identify and assess strategic risks.
- Early warning systems and continuous risk monitoring.
- Decision-making under uncertainty and in crisis situations.
- The limits of predictive models and the risks of overreliance on them.
- Case study: using scenarios to respond to a sudden change in the business environment.

UNIT FIVE: AI GOVERNANCE AND THE ORGANIZATIONAL TRANSFORMATION ROADMAP

- Principles of responsible AI and professional ethics in decision-making.
- Transparency, explainability, and accountability in algorithm-supported decisions.
- Algorithmic bias, data protection, and privacy.
- Designing an organizational governance framework for AI use.
- Linking AI initiatives to strategic objectives and key performance indicators.
- Change management and building a data-driven organizational culture.
- Setting priorities, implementation phases, and measuring initiative returns.
- Final project: presenting a mini roadmap for integrating AI into the decision-making system.



FAQ:

QUALIFICATIONS REQUIRED FOR REGISTERING TO THIS COURSE?

There are no requirements.

HOW LONG IS EACH DAILY SESSION, AND WHAT IS THE TOTAL NUMBER OF TRAINING HOURS FOR THE COURSE?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

SOMETHING TO THINK ABOUT:

If intelligent systems become more accurate than humans at predicting the outcomes of strategic choices, who holds true legitimacy over the decision, and who bears responsibility when the algorithm is wrong or when the leader is wrong to ignore it?

WHAT UNIQUE QUALITIES DOES THIS COURSE OFFER COMPARED TO OTHER COURSES?

This training course stands out because it does not treat artificial intelligence as an isolated technical subject. Instead, it places AI at the heart of leadership and strategic work, speaking to leaders in the language of management rather than programming, and focusing on how to ask the right questions, read outputs critically, and turn analysis into accountable decisions. BIG BEN Training Center ensures that participants leave with a clear picture of where AI fits within their organization's planning and decision-making cycle, not just a general familiarity with terminology. The course combines rigorous academic frameworks with real-world application through diverse case studies from the government and private sectors, along with simulations that place participants in realistic situations where data conflicts and interests compete. One of its key strengths is its balanced attention to both opportunities and risks: it highlights the strategic value of prediction and intelligent analysis while addressing bias, governance, accountability, and ethics, areas often overlooked in similar programs. The units follow a logical progression from understanding to analysis, decision-making, foresight, and finally governance and implementation, concluding with a final project in which each participant builds an actionable mini roadmap. BIG BEN Training Center delivers this experience through specialized trainers who combine strategic expertise with a practical understanding of modern technologies, ensuring direct value for participants and their organizations.