BLACKBIRD FOR TRAINING

AI-Driven Strategic Workforce Planning

20 – 24 December 2026
Cairo (Egypt)



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Introduction

Organizations in the Middle East and North Africa are entering an era where AI-Driven Strategic Workforce Planning is no longer a luxury but a necessity. The increasing complexity of global markets, technological disruption, and changing workforce demographics demand a new approach to talent management.

This program is designed for executives, team leaders, and HR specialists across both government and private institutions. It also targets professionals at all levels—from early-career employees aiming to build foundational skills, to mid- and senior-level managers seeking to enhance leadership and strategic capabilities.

By integrating artificial intelligence with strategic workforce planning, organizations can accurately forecast talent needs, optimize workforce structures, and ensure alignment with long-term business goals. Participants will gain practical insights, tools, and strategies to adopt AI-enabled planning methods that strengthen institutional performance, reduce costs, and enhance productivity.

Course Objectives

By the end of the program, participants will be able to:

- Understand the fundamentals of AI-Driven Strategic Workforce Planning.
- Apply predictive analytics to forecast workforce supply and demand.
- Identify critical roles and skills needed for future business priorities.
- Use AI tools to optimize recruitment, training, and retention strategies.
- Align workforce planning with organizational strategy and market dynamics.
- Evaluate the financial impact of workforce planning decisions.
- Design flexible models to manage workforce disruptions and uncertainties.
- Develop practical roadmaps for embedding AI-driven planning in their organizations.



Course Outlines

Day 1: Foundations of AI in Workforce Planning

- Introduction to workforce planning and its strategic importance.
- Role of artificial intelligence in transforming workforce management.
- Key concepts: predictive modeling, scenario planning, and optimization.
- Review of leading global practices and regional case studies.
- Differences between traditional and AI-enabled workforce planning.
- Discussion on common challenges in organizational adoption.

Day 2: Data, Analytics, and Forecasting Workforce Needs

- Data sources for workforce planning: internal and external.
- Big Data and HR analytics in workforce forecasting.
- AI techniques for predicting workforce supply and demand.
- Identifying skill gaps and future workforce requirements.
- Case study: Banking and telecom industry forecasting models.
- Practical exercise: Using data for workforce projections.

Day 3: AI-Enabled Talent Acquisition and Deployment

- Smart recruitment through AI-powered systems.
- Matching skills with business requirements using algorithms.
- Workforce deployment models supported by AI.
- Integrating gig workers and flexible workforce structures.
- Using AI for employee onboarding and mobility strategies.
- Group activity: Designing an AI-enabled workforce deployment plan.

Day 4: Building Future-Ready Skills and Capabilities

- Leveraging AI for learning and development planning.
- Personalized training programs using adaptive learning systems.
- Monitoring workforce performance through AI dashboards.
- Improving employee experience through intelligent solutions.
- Case study: Oil and gas sector skills transformation with AI.
- Workshop: Building a capability development roadmap.



Day 5: Strategic, Ethical, and Practical Dimensions

- Ethical considerations in AI-driven workforce planning.
- Addressing bias and fairness in algorithms.
- Aligning workforce strategies with organizational long-term goals.
- Financial implications and ROI of workforce planning.
- Group project: Creating a comprehensive AI-driven workforce strategy.
- Wrap-up and integration of program insights into actionable steps.

Why Attend This Course: Wins & Losses!

- Gain advanced insights into AI applications in strategic workforce planning.
- Learn predictive and analytical techniques for accurate forecasting.
- Develop frameworks for aligning the workforce with strategic goals.
- Improve talent acquisition, retention, and development strategies.
- Enhance organizational resilience against market disruptions.
- Access case studies tailored to MENA industries.
- Participate in hands-on exercises and real-world applications.
- Strengthen leadership capabilities in managing future workforce needs.

Conclusion

AI-Driven Strategic Workforce Planning marks a paradigm shift in how organizations approach human capital management. By integrating artificial intelligence into forecasting, talent deployment, and skills development, institutions can achieve greater efficiency, agility, and alignment with long-term goals.

This program equips leaders, HR professionals, and decision-makers with the knowledge and tools to apply AI-driven strategies responsibly and effectively. It balances technological innovation with ethical considerations, ensuring fairness, transparency, and sustainable growth.

For organizations across the Middle East and North Africa, adopting AI-enabled workforce planning is not just about staying competitive—it is about building resilient, future-ready workforces capable of thriving in an uncertain global landscape.

