

BIG DATA ANALYTICS FOR STRATEGIC DECISION-MAKING

“Leveraging Big Data to Make Informed, Strategic Business Decisions”

Schedule

Date	Venue	Fees (Face-to-Face)
03 - 07 May 2026	Cairo, Egypt	USD 3495 per delegate

► Available delivery methods: Face-to-Face & Online Training

Introduction

In today's data-driven world, organizations must harness the power of big data to make informed decisions that drive growth and maintain a competitive advantage. This 5-day course is designed to provide business professionals with the knowledge and tools necessary to leverage big data analytics for strategic decision-making. Participants will explore key concepts of big data, data visualization, predictive analytics, and machine learning, and how these technologies can be applied to solve complex business problems.

By the end of the course, participants will be equipped with the skills to analyze large datasets, extract actionable insights, and make data-driven decisions that improve business performance and align with organizational goals.

Objectives

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

- Understand the fundamentals of big data and its role in strategic decision-making.
- Apply data analytics tools and techniques to analyze large and complex datasets.
- Utilize predictive analytics and machine learning models to forecast trends and outcomes.
- Make data-driven decisions that align with organizational objectives and goals.
- Visualize and communicate analytical insights to stakeholders in a meaningful way.
- Integrate big data analytics into business processes and strategic planning.

Why Attend

- Learn how to harness big data to make better, more informed business decisions.
- Understand how predictive analytics and machine learning can optimize business strategies.
- Gain hands-on experience with data analytics tools and technologies used by industry leaders.
- Develop the ability to interpret complex datasets and extract actionable insights.
- Improve your ability to drive organizational growth and innovation through data-driven decision-making.
- Gain a competitive edge by understanding how big data can be applied across various industries.

Target Audience

This program is designed for:

- Business leaders and senior executives who want to leverage big data for strategic decision-making
- Data scientists, analysts, and IT professionals responsible for managing and analyzing big data
- Managers and decision-makers in marketing, finance, operations, and other business functions
- Anyone interested in enhancing their understanding of big data analytics and its applications in business strategy

Individual Benefits

Key competencies that will be developed include:

- Proficiency in analyzing and interpreting big data using advanced analytics tools.
- Ability to use predictive analytics to forecast business trends and make strategic decisions.
- Enhanced skills in visualizing data and presenting insights to non-technical stakeholders.
- Understanding of the role of machine learning in automating decision-making processes.
- Practical knowledge of integrating big data analytics into business strategies.

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved ability to make data-driven decisions that align with business goals and improve performance.
- Enhanced data analytics capabilities, enabling more effective problem-solving and strategic planning.
- Better utilization of big data to gain insights into market trends, customer behavior, and operational efficiency.
- Increased efficiency and innovation through the application of predictive analytics and machine learning.
- Stronger competitive advantage through informed decision-making based on actionable data insights.

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings - In-depth lectures on big data concepts, analytics tools, and techniques for strategic decision-making.
- Case Studies - Real-world examples of how big data analytics has been applied to solve business problems.
- Workshops - Hands-on exercises and simulations to apply big data analytics tools and techniques.
- Peer Exchange - Group discussions and collaborative learning experiences to share insights and challenges.
- Tools - Practical tools and software used in the field of big data analytics for strategic decision-making.

MAWA EVENTS

Address: No. 857, Block A2, Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net



Course Outline

Training Hours: 7:30 AM – 3:30 PM Daily Format: 3–4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Introduction to Big Data and Analytics

- Module 1: Understanding Big Data (07:30 – 09:30)
 - What is big data? Characteristics, sources, and types of big data
 - The role of big data in modern business strategy and decision-making
 - Big data architecture and the technology landscape
- Module 2: Data Analytics Overview (09:45 – 11:15)
 - Overview of data analytics techniques: descriptive, diagnostic, predictive, and prescriptive analytics
 - Introduction to data processing, cleaning, and transformation techniques
 - The importance of data quality and governance in big data projects
- Module 3: Big Data Tools and Technologies (11:30 – 01:00)
 - Introduction to big data analytics tools: Hadoop, Spark, NoSQL databases
 - The role of cloud computing in managing big data
 - An overview of data visualization tools and techniques

Day 2: Predictive Analytics and Machine Learning

- Module 1: Introduction to Predictive Analytics (07:30 – 09:30)
 - Understanding predictive analytics and its role in business forecasting
 - Techniques for building predictive models: regression, classification, time series forecasting
 - The importance of statistical analysis in predictive analytics
- Module 2: Introduction to Machine Learning (09:45 – 11:15)
 - Overview of machine learning techniques and algorithms
 - Types of machine learning: supervised, unsupervised, and reinforcement learning
 - Applications of machine learning in business decision-making
- Module 3: Hands-On Predictive Analytics (11:30 – 01:00)
 - Using tools like Python and R for building predictive models
 - Case studies on predictive analytics applications in marketing, finance, and operations
 - Evaluating model performance and accuracy

Day 3: Data Visualization and Reporting

- Module 1: Principles of Data Visualization (07:30 – 09:30)
 - Best practices for creating clear and actionable data visualizations
 - Tools for visualizing big data: Tableau, Power BI, and D3.js
 - Design principles for effective data storytelling
- Module 2: Communicating Insights to Stakeholders (09:45 – 11:15)
 - Strategies for presenting complex data insights to non-technical audiences
 - Creating interactive dashboards and reports for decision-makers
 - Using storytelling to communicate insights from big data analysis
- Module 3: Creating Reports and Presentations (11:30 – 01:00)
 - Structuring reports to provide actionable business insights
 - Visualizing key performance indicators (KPIs) and metrics
 - Best practices for reporting business outcomes based on data analytics

Day 4: Integrating Big Data into Business Strategy

-

Module 1: Aligning Big Data Analytics with Business Strategy (07:30 – 09:30)

- Understanding the role of big data in strategic planning and decision-making
- Integrating analytics into the overall business strategy
- Using big data to identify business opportunities and enhance competitive advantage

Module 2: Data-Driven Innovation (09:45 – 11:15)

- Leveraging big data for product and service innovation
- Case studies on companies using big data to create new business models
- Building a data-driven culture within the organization

Module 3: Ethics and Privacy in Big Data Analytics (11:30 – 01:00)

- Ethical considerations in collecting and using big data
- Addressing privacy concerns and ensuring compliance with data protection regulations
- Best practices for responsible and ethical use of big data

Day 5: Advanced Analytics and Future Trends**Module 1: Advanced Analytics Techniques (07:30 – 09:30)**

- Techniques for anomaly detection, cluster analysis, and recommendation systems
- The role of AI and deep learning in big data analytics
- Case studies on advanced analytics applications in industries like healthcare and retail

Module 2: The Future of Big Data Analytics (09:45 – 11:15)

- Emerging trends in big data: edge computing, AI integration, real-time analytics
- The impact of big data on industries and business operations in the future
- Preparing for the next wave of big data innovations

Module 3: Final Project and Course Wrap-Up (11:30 – 01:00)

- Group projects: Applying big data analytics to solve real business problems
- Review and discussion of key takeaways from the course
- Final Q&A session and certificate distribution

Certification

Upon completing the training course, participants will receive a Certificate of Completion in Big Data Analytics for Strategic Decision-Making, recognizing their ability to apply big data analytics tools and techniques to make informed, strategic decisions in business.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training

Interested in running this course for your team?

Please contact us:

TEL:

+601116373203

EMAIL:

info@mawaevents.net

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.