

# € TRAINING

Data Management Security and  
Warehousing

A group of four smiling business professionals (two men and two women) are seated at a table in a meeting room. They are all wearing white shirts. The woman in the foreground is wearing a black top and a multi-strand necklace. The background is a bright, modern office environment.

4 - 8 August 2024  
Cairo (Egypt)



# Data Management Security and Warehousing

REF: G1235 DATE: 4 - 8 August 2024 Venue: Cairo (Egypt) - Fee: 4095 Euro

## Introduction:

This training program is designed for professionals and companies eager to leverage Big Data opportunities. As businesses increasingly rely on Data Analytics and Data Science to innovate and enhance operations, the term "Industrial Revolution 4.0" has become ubiquitous. Effective data management is crucial in this era, encompassing processes such as acquisition, validation, storage, protection, and processing to ensure data accessibility and reliability. This program emphasizes the importance of proper data warehousing, guiding participants in selecting the most suitable solutions amidst the diverse options available.

## Program Objectives:

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

- Understand the fundamental principles of Big Data and its impact on modern businesses.
- Explore the role of Data Analytics and Data Science in addressing business challenges and driving innovation.
- Master the administrative processes involved in effective data management, including acquisition, validation, storage, protection, and processing.
- Gain insight into the diverse range of data warehousing and security solutions available in the era of Big Data.
- Develop the skills to evaluate and select the most appropriate data warehousing and security approaches for specific business needs.
- Apply learned concepts and techniques to optimize data-driven decision-making and enhance organizational performance.

## Targeted Audience:

- Data analysts
- Data scientists.
- Information technology professionals.
- Business intelligence professionals.
- Database administrators.
- Data managers.
- Project managers involved in data-related projects.

- Executives and decision-makers seeking to leverage data for strategic insights and decision-making.

## Program Outlines:

### Unit 1.

#### Introduction to Data Management and Warehousing:

- Overview of Big Data and its implications.
- Importance of strategic information in decision-making.
- Fundamentals of data management and warehousing.
- Role of data warehousing in modern business strategies.
- Challenges and opportunities in the era of Big Data.
- Best practices for data management and warehousing projects.

### Unit 2.

#### Planning and Project Management in Data Warehousing:

- Steps involved in planning a data warehousing project.
- Project management methodologies and frameworks.
- Defining project scope, objectives, and deliverables.
- Risk assessment and mitigation strategies.
- Resource allocation and scheduling.
- Monitoring, evaluation, and project closure.

### Unit 3.

#### Data Acquisition and Validation:

- Methods for acquiring and collecting data.
- Importance of data quality and integrity.
- Techniques for data validation and cleansing.
- Data profiling and metadata management.
- Strategies for handling missing or incomplete data.

- Tools and technologies for data acquisition and validation.

#### Unit 4.

##### Data Security Strategies and Best Practices:

- Understanding the importance of data security.
- Common threats and vulnerabilities in data environments.
- Principles of data security and encryption.
- Access control and authentication mechanisms.
- Data privacy regulations and compliance requirements.
- Implementing security policies and procedures.

#### Unit 5.

##### Advanced Topics in Data Warehousing and Big Data:

- Scalability and performance optimization in data warehousing.
- Real-time data processing and analytics.
- Data integration and interoperability.
- Cloud-based data warehousing solutions.
- Emerging trends and technologies in Big Data.
- Case studies and practical applications of advanced data warehousing concepts.