



*Training Course:  
Analytical Production Data Management*

*20 - 24 October 2024  
Cairo (Egypt)  
Holiday Inn & Suites Cairo Maadi, an IHG Hotel*

## Training Course: Analytical Production Data Management

Training Course code: EN235410 From: 20 - 24 October 2024 Venue: Cairo (Egypt) - Holiday Inn & Suites Cairo Maadi, an IHG Hotel Training Course Fees: 3900 € Euro

### Introduction

In today's fast-paced and data-driven industrial landscape, the ability to efficiently manage and analyze production data is crucial for achieving operational excellence and competitive advantage. This 5-day professional training program on Analytical Production Data Management is designed to equip participants with the knowledge and skills necessary to effectively collect, store, analyze, and leverage production data for informed decision-making and strategic planning.

### Objectives

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

- **Understand Key Concepts and Tools:** Gain a comprehensive understanding of the fundamental concepts and tools associated with production data management.
- **Implement Data Collection and Storage Solutions:** Learn various techniques for data collection and explore different storage architectures, ensuring data integrity and security.
- **Analyze and Visualize Data:** Develop skills in data analysis and visualization, using industry-standard tools to turn raw data into actionable insights.
- **Integrate and Report Data Effectively:** Master data integration methods and advanced reporting strategies to support business intelligence and decision-making.
- **Apply Advanced Analytical Techniques:** Explore the application of big data, machine learning, and AI in the context of production data management.
- **Adopt Best Practices and Stay Current:** Understand and implement industry best practices and stay updated with emerging trends in data management.
- **Analyze Productivity Relationships:** Understand and analyze the relationships between productivity, operations, and shipments.

### Target Audience

This training program is ideal for:

- **Data Analysts and Data Scientists:** Professionals responsible for analyzing production data and deriving actionable insights.
- **Production Managers and Engineers:** Individuals overseeing production processes who need to make data-driven decisions to improve efficiency and productivity.
- **IT and Database Professionals:** Technical experts managing the infrastructure and tools for data collection, storage, and analysis.
- **Quality Control Specialists:** Professionals focused on maintaining and improving production quality through data analysis.

- Business Intelligence and Operations Analysts: Analysts working to optimize business processes and operations using production data.
- Executives and Decision-Makers: Senior leaders seeking to understand how to leverage production data for strategic planning and competitive advantage.
- Oil and Gas Professionals: Individuals in the oil and gas sector looking for advanced data management certifications and training.

## Program Outline

### Day 1: Foundations of Analytical Production Data Management

- Program Introduction and Objectives
  - Welcome address and program goals.
  - Overview of the training agenda.
- Basic Understanding of Data Management Systems
  - Fundamental concepts and definitions.
  - The role and importance of data management in production.
- Introduction to PDM Production Data Management Analysis Concepts
  - Overview of PDM and its significance in production environments.
  - Key concepts and methodologies.

### Day 2: Data Collection and Storage Solutions

- Data Collection Techniques
  - Methods for data collection: manual vs. automated.
  - Identifying and leveraging various data sources in production.
- Data Storage Architectures
  - Overview of storage solutions: relational databases, NoSQL, and data lakes.
  - Cloud-based vs. on-premises storage solutions.
- Ensuring Data Integrity and Security
  - Strategies to maintain data accuracy and reliability.
  - Implementing best practices for data security and compliance.

### Day 3: Data Analysis and Visualization

- Experience with Database Technology and Data Analysis Tools
  - Detailed exploration of database technologies.
  - Introduction to data analysis tools such as SQL, Python, R, etc.
- Principles of Data Analysis
  - Key concepts and methodologies in data analysis.
  - Utilization of statistical tools and software.
- Visualization Techniques and Tools
  - Importance of data visualization in decision making.
  - Hands-on sessions with tools like Tableau, Power BI, and others.

- Practical Application
  - Exercises and case studies in data analysis.
  - Creating meaningful visualizations from production data.

#### Day 4: Data Integration and Reporting

- Data Integration Methods
  - Techniques for integrating data from disparate sources.
  - Detailed exploration of ETL Extract, Transform, Load processes.
- Advanced Reporting Strategies
  - Developing impactful reports for stakeholders.
  - Defining and tracking key performance indicators KPIs and metrics.
- Real-World Applications
  - Case studies demonstrating effective data integration and reporting.
  - Interactive sessions and discussions on best practices.

#### Day 5: Advanced Topics and Strategic Best Practices

- Advanced Data Management Certifications Training for Oil and Gas Professionals
  - Specific training modules for oil and gas industry data management.
  - Handling and managing large-scale production data in the oil and gas sector.
- Exploring Big Data and Advanced Analytics
  - Introduction to big data concepts and technologies.
  - Application of machine learning and AI in production data management.
- Analyzing Relationships of Productivity, Operations, and Shipments
  - Techniques for analyzing productivity data.
  - Understanding the interrelationships between operations and shipment data.
- Industry Best Practices and Emerging Trends
  - Overview of industry standards and best practices.
  - Discussion on future trends and innovations in data management.
- Program Conclusion and Review
  - Summary and review of key learnings.
  - Interactive Q&A session.
  - Participant feedback and course evaluation.

## Registration form on the Training Course: Analytical Production Data Management

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

### Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....  
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### Company Information

Company Name: .....  
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### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....  
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### Payment Method

- Please find enclosed a cheque made payable to Global Horizon
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