Digital Transformation and Innovation

Data-Driven Decision Making for Strategic Execution in Engineering

Course Introduction

This course focuses on leveraging data analytics and insights to enhance strategy execution in engineering and operations. It provides managers with advanced knowledge and skills to use data effectively in decision-making, performance tracking, and continuous improvement of strategic initiatives.

Target Audience

- Engineering Managers
- Data Analysts
- Business Analysts
- Operations Managers
- Project Managers
- Product Managers
- Program Managers
- Strategic Planners

Learning Objectives

- Understand the role of data in strategic decision-making and execution
- Develop skills to implement data-driven performance management systems
- Learn to use analytics for tracking and improving strategy execution
- Gain insights into predictive analytics for proactive strategy management
- Master techniques for fostering a data-driven culture in engineering and operations

Course Outline

- **Day 01**

  Foundations of Data-Driven Strategy Execution

  - The role of data in strategy execution
  - Key performance indicators for engineering and operations
  - Data collection and management in technical environments
  - Case study: Successful data-driven strategy execution in operations
- **Day 02**

  Implementing Data-Driven Performance Management

  - Designing dashboards and scorecards for strategy tracking
  - Real-time performance monitoring in engineering projects
  - Using data visualization for effective communication
- **Day 03**

  Advanced Analytics for Strategy Optimization

  - Predictive analytics in engineering and operations
  - Using machine learning for process optimization
  - Big data analytics in complex engineering environments
  - Hands-on exercise: Applying analytics to a strategic initiative
- **Day 04**

  Data-Driven Decision Making in Operations

  - Framework for data-driven decision making
  - Overcoming cognitive biases in technical decision-making
  - Scenario planning and simulation in strategy execution
  - Group discussion: Addressing challenges in data-driven operations
- **Day 05**

  Building a Data-Driven Culture

  - Fostering data literacy in engineering teams
  - Change management for implementing data-driven practices
  - Ethical considerations in data-driven decision making

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 28, 2025	May 2, 2025	5 days	4250.00 $	UAE - Abu Dhabi
July 27, 2025	July 31, 2025	5 days	4250.00 $	KSA - Riyadh
Oct. 27, 2025	Oct. 31, 2025	5 days	5950.00 $	USA - Texas
Dec. 21, 2025	Dec. 25, 2025	5 days	2150.00 $	Virtual - Online