



# **BUSINESS ANALYTICS**

August 04 – 08, 2025

### **Course Objective:**

Effective use of business analytics is critical for informed decision-making, optimizing business processes, and achieving strategic objectives in today's competitive landsc Organizations across all sectors increasingly rely on data-driven insights to understand market trends, customer behavior, and operational efficiency. However, effectively leveraging data requires more than just collecting it; it demands the professional competence to analyze, interpret, and translate data into actionable strategies. These competencies encompass understanding business problems, formulating analytical questions, selecting appropriate analytical methods, interpreting results, and communicating findings to stakeholders. In this context, this Management Development Program on Business Analytics is designed for managers, executives, and business professionals seeking to enhance their professional competencies, knowledge, and skills on how business analytics can be used to drive better business outcomes. The program is focused on building practical perspectives on how analytical tools and methods can be applied to real-world business challenges, primarily through hands-on exercises, simulated case discussions, and examples of best practices, with a focus on interpretation and application rather than the technical details of the underlying algorithms.



## **Learning Objectives:**

- Understand the fundamental principles of public procurement and appreciate the value of objectivity, transparency, fairness, accountability, efficiency, and effectiveness in taking procurement decisions.
- Gain an in-depth understanding on the drivers and levers of effective procurement.
- Build clarity on the requirements of regulatory compliances and learn to navigate through them in implementing effective sourcing strategies.
- Understand the nuances of contract design and drafting so as to ensure contract performance, regulatory compliances, and dispute resolutions.
- Appreciate the value advancements in technologies such as, electronic marketplace, data analytics, AI/ML etc. and acquire the ability to make procurement decisions more efficient and effective

### **Course Content:**

### **Module 1: Foundations of Business Analytics**

- Introduction to Business Analytics:
- Types of Business Analytics: Descriptive, diagnostic, predictive, and prescriptive analytics
- The Analytics Process
- Data Visualization and Communication

#### **Module 2: Predictive Analytics**

- Introduction to Predictive Modeling:
  Overview of predictive modeling techniques, including regression, classification, and time series analysis.
- Regression Analysis: Building and interpreting linear and multiple regression models to predict continuous outcomes.
- Classification Techniques: Using classification algorithms (e.g., decision trees, logistic regression) to predict categorical outcomes.
- Time Series Analysis: Forecasting future values based on historical time series data.

### **Module 3: Prescriptive Analytics**

- Introduction to Optimization: Overview of optimization techniques for finding the best solution among a set of alternatives.
- Simulation and What-If Analysis: Using simulation to evaluate different scenarios and assess their potential outcomes.
- Decision Analysis: Structuring complex decisions using decision trees and other decision-making tools.
- Application of Prescriptive Analytics in Business: Examples of how prescriptive analytics can be used in areas such as pricing, inventory management, and resource allocation.

## Module 4: Analytics in Practice and Emerging Trends

- Applying Analytics to Specific Business Functions
- Ethical Considerations in Business Analytics
- Emerging Trends in Business Analytics: An overview of current and future trends in business analytics, such as big data analytics, artificial intelligence, and machine learning (with a focus on business implications)

### **Pedagogy:**

The program will employ a blended learning approach combining interactive lectures, case studies, group discussions, hands-on exercises, and real-world examples. The program will focus on applying analytical concepts and tools to practical business scenarios. Case studies will be drawn from diverse industries and functional areas to illustrate the application of business analytics in different contexts. Hands-on exercises will provide participants with opportunities to work with data and interpret results using commonly used analytical tools (with a focus on user interfaces and interpretation, rather than coding or deep technical implementation). The will pedagogy emphasize practical application and interpretation of results, rather than the technical details of the underlying algorithms or software

### Participant background:

The program is aimed at managers, executives, professionals business across various functional areas such as marketing, finance, operations, human resources, and strategy, who are seeking to leverage data and analytics to improve decision-making in their respective domains. Business analysts, project managers, consultants, and other professionals involved in data-driven projects would also immensely from the program. Specifically, individuals who are responsible for developing business strategies, analyzing market trends, understanding customer behavior, optimizing business processes, or measuring performance would find this program highly relevant.

### **Facilitator:**



Prof. Soumya Roy Associate Professor. Quantitative Methods and Operations Management



Prof. Ashutosh Sarkar Professor, Quantitative Methods and Operations Management

## **Programme Fee:**

Rs. 90,000 (Residential), Rs. 80,000 (Non-Residential). **GST @ 18%** 

### **Cancellation Policy:**

Joining instructions will be sent to the selected candidates 10 days prior to the start of the programme. Kindly do not make your plans unless you receive the confirmation email from IIM Kozhikode. If the programme is cancelled, the participants or the sponsoring organization will have the option to either get the fee paid by them adjusted against any other management development programme(s) of the Institute or get a refund. IIM Kozhikode will not be liable for any other expenses incurred by the organization participant. Also the transaction fee will not be refunded.



Prof. Argum Mateen Associate Professor, Quantitative Methods and Operations Management



### **Management Development Programme**

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