DIGITAL M&E, DATA ANALYTICS, DASHBOARDS, AI & EVIDENCE SYSTEMS COURSE

Introduction

The Digital Monitoring, Evaluation & Learning: Data Analytics, Dashboards, AI & Evidence Systems Course is a future-focused professional programme designed to equip MEL, M&E, programme and data professionals with the knowledge and practical skills required to use digital technologies, data analytics and artificial intelligence to strengthen monitoring, evaluation, evidence generation and management decision-making. The programme examines how digital transformation is changing the way organisations collect, manage, analyse, visualise and use programme data. Participants explore the transition from traditional, largely manual M&E processes towards more integrated digital systems capable of supporting timely data collection, real-time monitoring, automated reporting, performance analysis and evidence-based decision-making. A key component of the course focuses on digital data collection and M&E information systems. Participants examine mobile and online data-collection approaches, digital forms, databases, information flows and system requirements, while considering how different technologies can be selected and adapted to programme context and organisational needs. The programme also addresses M&E data management and quality assurance, including data validation, verification, cleaning, consistency checks, data governance and information integrity. Participants learn how digital systems can improve data quality while recognising the importance of appropriate controls, human oversight and clear data-management responsibilities. Particular attention is given to data analytics and performance measurement. Participants explore how monitoring data can be transformed into useful information through trend analysis, performance analysis, comparative analysis and evidence synthesis. The course demonstrates how analytical approaches can help managers identify performance gaps, emerging risks, patterns and opportunities for programme improvement. The programme further examines the development and use of

M&E dashboards and data visualisation. Participants learn how to present complex performance information in accessible formats that support programme reviews, management meetings, strategic planning and decision-making. Emphasis is placed on selecting appropriate indicators, designing useful visualisations and communicating evidence clearly to different audiences.

Course Objectives

- Understand digital MEL systems.
- Plan digital data collection.
- Manage M&E databases.
- Analyse programme data.
- Develop performance dashboards.
- Apply data visualisation.
- Explore AI applications in MEL.
- Improve automated reporting.
- Strengthen evidence systems.
- Promote responsible data use.

Course Modules

> Module 1: Digital MEL Transformation

- Digital MEL concepts
- Digital transformation
- Technology opportunities
- Digital MEL strategy

> Module 2: Digital Data Collection

- Mobile data collection
- Digital forms
- Online surveys
- Field data systems

> Module 3: M&E Information Systems

- MIS principles
- System architecture

- User requirements
- Information flows

> Module 4: M&E Databases
- Database concepts
- Data structures
- Data management
- Data integration

> Module 5: Data Quality in Digital Systems
- Automated validation
- Data verification
- Error management
- Quality controls

> Module 6: Data Analytics for MEL
- Data preparation
- Descriptive analytics
- Trend analysis
- Performance analysis

> Module 7: Dashboards and Data Visualisation
- Dashboard principles
- Visualisation
- KPI dashboards
- Data storytelling

> Module 8: AI for Monitoring, Evaluation & Learning
- AI applications in MEL
- Evidence synthesis
- Automated reporting
- Responsible AI use

> Module 9: Digital Reporting and Evidence Systems
- Automated reports
- Real-time reporting
- Evidence repositories
- Management information

> Module 10: : Digital Governance and MEL Strategy

- Data governance
- Cybersecurity awareness
- Technology selection
- Digital MEL implementation