



Digital Transformation and Innovation

Data Collection Techniques

Course Introduction

This comprehensive training program on Data Collection Techniques provides participants with an in-depth understanding of the principles and practices essential for effective data collection and management. Over the course of five days, participants will explore the significance of data collection within historical contexts and learn to define comprehensive data collection plans tailored to their projects' needs.

Through a blend of theoretical insights and practical exercises, participants will delve into various data collection techniques, including interviews, questionnaires, surveys, observations, and focus groups. Additionally, participants will gain insights into handling Big Data, understanding its fundamentals, storage, processing, analytics, and strategies, while also addressing privacy concerns and ensuring data quality. The training culminates with a focus on real-time data gathering methods and their applications, providing participants with the tools and knowledge to navigate contemporary challenges in data collection effectively.

Target Audience

This training program is tailored for professionals across diverse industries seeking to enhance their proficiency in data collection techniques and strategies.

Learning Objectives

- Grasp the importance of devising a data collection strategy.
- Distinguish between primary and secondary data sources.
- Determine the appropriate sample size for data collection.
- Apply data quality checklists to ensure accuracy and reliability.
- Comprehend the characteristics of Big Data.

- Identify the advantages of real-time data collection techniques.
- Recognize privacy concerns associated with data collection activities.

Course Outline

• Day 01

The Importance of Data Collection

- Historical Context
- Data Sources
- Defining the Data Collection Plan
- Determining the Sample Size Required
- Project Charter
- Common Sources of Data

• Day 02

Collecting Data

- Most Common Data Collection Techniques
- Conducting an Interview
- Using Questionnaires and Surveys
- Observations and Focus Groups
- The Aspects of Big Data
- Automated Techniques for Data Collection
- Data Management Strategy

• Day 03

Examples of Use of Data Collection Techniques

- Planning and Conducting an Interview
- Planning and Creating a Survey
- Determining Survey Scales
- Conducting Experiments

- Plan and Use Online (electronic) Surveying Tools
- Sources of Secondary Data
- Use and Referencing of Secondary Data

• Day 04

Big Data Concepts

- Big Data Fundamentals
- Five V's of Big Data
- Enterprise Technologies for Big Data Collection and Analysis
- Big Data Storage and Processing
- Big Data Analytics
- Big Data Strategy
- Preserving Privacy with Big Data Applications
- Data Quality (completeness, uniqueness, timeliness, validity, accuracy, consistency)

• Day 05

Real-time Data Gathering and Its Application

- The Meaning of Real-time Data Gathering
- Gathering Data from RFID
- Gathering Geolocations of Mobile Phones and its Use in Urban Planning
- Multimedia Data
- Data Gathering for Risk and Uncertainty Management
- Errors and its Mitigation in Real-time Data Gathering
- New Concepts, Methodologies and Way Forward

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 12, 2025	May 16, 2025	5 days	5950.00 \$	switzerland - Geneva

FROM	TO	DURATION	FEES	LOCATION
Aug. 25, 2025	Aug. 29, 2025	5 days	4250.00 \$	UAE - Dubai
Nov. 3, 2025	Nov. 7, 2025	5 days	4250.00 \$	UAE - Abu Dhabi