



# Data Visualisation & Storytelling (Intermediate Level)

## Overview

This programme is designed to equip participants with the strategic skills required to transform complex operational, scientific, and business data into clear, engaging, and actionable visual insights. By bridging the gap between data visualisation and human cognitive understanding, participants will learn how to present data more effectively, turning graphs and charts into compelling stories that support decision-making and align with daily operational insights and management expectations. The programme focuses not only on creating visually appealing charts, but also on helping participants identify the right message, choose suitable visualisation techniques, simplify complex findings, and communicate insights persuasively to different stakeholder levels, especially senior management.

## Duration

2 Days

## Target Audience

Senior Associates who seek to enhance their data visualisation and presentation skills, with the objective of delivering impactful, persuasive, and data-driven insights that effectively support decision-making.

## Pre-Requisites

- Basic working knowledge of Microsoft Excel.
- Basic experience creating or reading reports, charts, dashboards, or presentation slides.
- Familiarity with common business data such as sales, operations, customer, project, or KPI data.
- Basic knowledge of Microsoft PowerPoint.
- No advanced programming, statistical, or business intelligence background is required.

## Objectives of the Program

- Understand the role of data visualisation and storytelling in improving business communication and decision-making.
- Identify and apply suitable data visualisation techniques to translate complex datasets into clear, meaningful, and visually appealing formats.

- Analyse how data visualisation and storytelling principles work together to simplify complex data and communicate technical or analytical findings to non-technical stakeholders.
- Apply audience-centric storytelling approaches by tailoring data narratives to different stakeholder levels, particularly senior management.
- Structure data-driven messages using clear insight statements, supporting evidence, and practical recommendations.
- Demonstrate the end-to-end data communication process, from identifying key insights and creating effective visuals to delivering a persuasive data-driven narrative.

## Learning Outcomes

By attending this course, the candidates will have achieved the following:

- Select the most appropriate chart or visual format based on the type of data, message, and audience.
- Improve the clarity and impact of charts by removing clutter, highlighting key insights, and applying effective visual design principles.
- Convert raw data, tables, and generic charts into clear visual stories that communicate findings quickly and effectively.
- Develop simple but persuasive data narratives using context, insight, implication, and recommendation.
- Present analytical findings confidently to senior management and non-technical audiences.
- Create management-ready visual slides using Microsoft Excel and PowerPoint.
- Apply before-and-after visualisation techniques to improve existing reports, charts, dashboards, and presentation slides.

## Tools Required for the Course

Tool	Requirement	Purpose
Microsoft Excel	Required	Data preparation, basic analysis, PivotTables, chart creation, formatting, and hands-on visualisation exercises.
Microsoft PowerPoint	Required	Executive slide design, narrative flow, message headlines, before-and-after visualisation slides, and final data story presentation.
Microsoft Office 365 Account	Required	Access to Excel and PowerPoint. OneDrive and Teams may also be used for file sharing and collaboration.
Microsoft Teams / OneDrive	Optional	Sharing exercise files, group collaboration, and submission of group outputs.
Power BI Desktop	Optional only	Can be used for a short dashboard-style demonstration where relevant, but it is not required for the hands-on class.

## Training Methodology

- Instructor-led explanation of concepts and frameworks.
- Demonstrations using Microsoft Excel and PowerPoint.
- Hands-on exercises using sample datasets and existing chart examples.
- Before-and-after visualisation improvement activities.
- Group discussion and peer review of data communication approaches.
- Final data storytelling presentation with trainer feedback.

## Course Deliverables

- Sample Excel datasets for hands-on practice.
- Before-and-after visualisation examples.
- Chart selection guide.
- Data storytelling framework.
- Executive presentation slide template.
- Completed data visualisation exercises.
- Final short data storytelling presentation.
- Practical checklist for improving future data presentations.

## Expected Outcome

At the end of the programme, participants will be able to transform complex data into clear visuals and persuasive stories that support better decision-making. They will be able to create cleaner charts, communicate insights with stronger impact, and deliver data-driven presentations that are suitable for senior management and non-technical stakeholders.

## Course Outline

### Day 1: Foundations of Effective Data Visualisation and Insight Communication

#### Module 1: Overview of Data Visualisation and Data Storytelling

##### Topics Covered:

- What data visualisation and data storytelling mean in a business context.
- Differences between data reporting, data visualisation, and data storytelling.
- Why good data communication matters for decision-making.
- Common problems in data presentations: too much information, poor chart selection, unclear messages, overloaded slides, visual clutter, and weak recommendations.
- How human attention and cognitive load affect data interpretation.
- The role of context, audience, and purpose in data communication.

##### Practical Activity:

- Participants review sample charts and identify which visuals communicate clearly and which visuals create confusion.

#### Module 2: Understanding Audience Needs and Key Messaging

##### Topics Covered:

- Identifying the target audience: senior management, operational teams, technical teams, and external stakeholders.
- Understanding what different audiences care about and how decision needs differ.
- Turning data into decision-supporting messages.
- Difference between data points, findings, insights, and recommendations.
- Writing clear insight statements using “what happened, why it matters, and what should be done next”.
- Avoiding overly technical explanations when presenting to non-technical audiences.

##### Practical Activity:

- Participants are given a sample dataset and asked to develop different messages for different audience groups.

## Module 3: Identifying Key Insights and Translating Data into Clear Messages

### Topics Covered:

- Exploring a dataset for meaningful insights.
- Identifying patterns, trends, comparisons, outliers, and changes over time.
- Prioritising what matters most in the data.
- Separating important insights from supporting details.
- Creating clear takeaway messages and using chart titles to guide the audience.
- Avoiding misleading interpretations and presenting data responsibly.

### Practical Activity:

- Participants are given business questions and must select the most suitable chart type for each question.

## Day 2: Designing Simple Visuals and Delivering Persuasive Data Stories

## Module 5: Designing Effective and Simple Visuals

### Topics Covered:

- Principles of effective visual design.
- Removing unnecessary clutter and improving chart readability.
- Using labels, titles, annotations, and callouts effectively.
- Highlighting the most important data point using emphasis and contrast.
- Managing colour, contrast, and visual hierarchy responsibly.
- Avoiding decorative visuals that do not support the message.
- Improving poor visuals using before-and-after techniques.

### Practical Activity:

- Participants redesign a cluttered chart into a clearer, simpler, and more persuasive visual using Excel and PowerPoint.

### Expected Output:

- Before-and-after visual comparison.

## Module 6: Structuring Data-Driven Stories

### Topics Covered:

- The structure of a persuasive data story.
- Turning analysis into a narrative flow.
- Building a story using context, challenge or question, key insight, evidence, business implication, and recommendation.
- Creating an executive-level presentation flow.
- Moving from showing data to guiding decisions.
- Using slide titles as message headlines.
- Creating a logical sequence from data to decision.

### Practical Activity:

- Participants convert a set of charts into a short management-style story.

### Expected Output:

- Draft data story flow with key messages and supporting visuals.

## Module 7: Building Management-Ready Data Presentation Slides

### Topics Covered:

- Characteristics of effective executive slides.
- Structuring a data slide for quick understanding.
- Applying the one slide, one key message principle.
- Using charts, text, and callouts effectively.
- Reducing text-heavy explanations and improving slide clarity.
- Presenting technical findings to non-technical stakeholders.
- Creating action-oriented conclusions.

### Practical Activity:

- Participants build a short PowerPoint data presentation consisting of an executive summary slide, key insight slide, supporting visual slide, and recommendation slide.

### Expected Output:

- Management-ready slide mini-deck.

## Module 8: Final Data Storytelling Activity and Presentation Practice

### Topics Covered:

- Reviewing the dataset and identifying the key business question.
- Identifying key insights and selecting suitable visualisations.
- Designing clear slides and structuring the narrative.
- Presenting findings persuasively to stakeholders.
- Handling questions from stakeholders and defending recommendations.

### Practical Activity:

- Participants work individually or in groups to create a short data-driven presentation using a sample dataset.

### Expected Output:

- Final short management-style data story with key business question, main insight, supporting visualisation, interpretation of findings, and recommendation or next action.