



Data Visualisation and Data Storytelling for Decision Makers



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Technical depth: Practitioner · **Practical mode:** Case study

Introduction

Organisations collect more data than ever, yet leadership meetings still stall over cluttered slides, misleading charts and dashboards that show everything and say nothing. When the message is buried, decisions are delayed or made on the wrong reading of the numbers. This Core Concept course equips managers to turn analysis into clear visual evidence and a structured narrative that a decision maker can act on. Participants apply recognised visual perception principles and reporting standards to case material from several sectors and leave with a Data Story Pack for a live decision in their own organisation.

Course Objectives

- Audit existing reports and dashboards for misleading scales, clutter and unclear messages using a structured chart critique checklist
- Select the chart type that fits each comparison, trend, distribution or part-to-whole question using the Financial Times Visual Vocabulary
- Apply IBCS notation, colour discipline and decluttering to produce consistent, accessible management visuals
- Structure a data-based briefing around a single headline message using the Pyramid Principle and Situation-Complication-Resolution
- Represent variance, forecast ranges and uncertainty honestly so that decision makers understand the confidence behind a figure
- Produce a Data Story Pack that combines a storyboard, a one-page dashboard and a headline-first briefing for a live decision

Target Audience

- Managers who prepare performance reports and briefings for senior leadership
- Finance and planning managers presenting budget variance, forecasts and business cases
- Department heads who present results to boards, committees and steering groups
- Reporting and analytics team leaders who design dashboards for business users
- Programme and project managers reporting status and risk to sponsors
- Strategy and performance office managers compiling organisational scorecards

Course Outline

Day 1: Why Data Fails to Persuade

- Anscombe's Quartet and the Limits of Summary Statistics
- DIKW Hierarchy: From Data to Decision
- Exploratory Versus Explanatory Visualisation Purpose Matrix
- Decision Audience Analysis with the Big Idea Worksheet
- Current Report Portfolio Assessment Using a Chart Critique Checklist

Day 2: Visual Perception Principles and Reporting Standards

- Pre-Attentive Attributes and Gestalt Principles of Grouping
- Cleveland and McGill Ranking of Graphical Perception Tasks
- IBCS SUCCESS Rules and Semantic Notation for Management Reports
- Tufte Data-Ink Ratio and Chartjunk Removal
- Chart Selection with the Financial Times Visual Vocabulary

Day 3: Building Clear Charts, Dashboards and Messages

- Comparison, Trend and Variance Charts in Excel and Power BI
- Colour Strategy with ColorBrewer Palettes and WCAG 2.2 Contrast Checks
- Before-and-After Redesign: Decluttering and Direct Annotation
- One-Page Dashboard Layout Using Few's Design Guidelines
- Headline Message Drafting with the Minto Pyramid Principle

Day 4: Distortion, Uncertainty and Narrative Structure

- Truncated Axis, Dual-Axis and Area Distortion Checks
- Uncertainty Display: Confidence Intervals and Forecast Fan Charts
- Situation-Complication-Resolution Narrative Arc
- Storyboarding with Sticky-Note Sequencing
- Decision-Maker Challenge Matrix for Anticipating Questions

Day 5: Case Work and the Data Story Pack

- Board Performance Pack Case Study: Critique and Redesign
 - Public Health Dashboard Case Study: Communicating Risk to Non-Specialists
 - Storyboard Build for a Decision from the Participant's Organisation
 - Data Story Pack Drafting
 - Timed Executive Briefing and Peer Critique Panel
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Skills You Will Gain

- Chart Selection
- Visual Perception Design
- Dashboard Layout
- Report Decluttering
- Narrative Structuring
- Uncertainty Communication
- Accessible Colour Design
- Executive Briefing Delivery

Why Attend This Course

- Return to work with a Data Story Pack for a live decision, already tested in a timed briefing before peers
- Present results headline first, so that a committee can reach a decision within the meeting rather than ask for another report
- Spot distorted or misleading charts in reports you receive before they shape a decision
- Compare reporting practice with managers from other sectors and countries who brief leadership on similar data

Conclusion

A chart earns its place in a report only when a decision maker reads the right message from it quickly and trusts it. This course moves from why data so often fails to persuade, through the perception principles and reporting standards behind effective visuals, to building charts, dashboards and headline messages, and then to the distortions and uncertainty that undermine them. The final day brings these methods together in a Data Story Pack that participants take back to their own leadership, ready for the next decision they need to support.
