



Survey Design and Data Collection Methods: Questionnaires, Sampling and Fieldwork



Survey Design and Data Collection Methods: Questionnaires, Sampling and Fieldwork

Introduction:

Survey design and data collection methods decide whether an organisation's evidence can be trusted. Many teams launch questionnaires with vague information needs, leading questions, convenience samples and no pilot, then discover missing values, low response and biased answers only when the report is due. This Core Concept course builds the skills to plan primary data gathering properly: questionnaire wording, sampling and sample size, interviews, focus groups, observation, online survey tools, response management, consent and data preparation. Participants work on multi-sector case material and produce a Data Collection Plan with a pilot-tested questionnaire and codebook.

Course Objectives:

- Translate a decision or research question into documented information needs, variables and a data collection method choice
- Write questionnaire items, response scales and routing that minimise ambiguity, leading wording and respondent burden
- Select a probability or non-probability sampling design and calculate a defensible sample size and margin of error
- Run semi-structured interviews, focus groups and structured observation with guides, protocols and field note templates
- Pilot and field a survey through an online tool while tracking response rates, nonresponse and measurement error
- Prepare collected data for analysis through consent records, coding, a codebook and documented cleaning rules

Target Audience:

- Analysts who gather primary data to answer operational and planning questions
 - Research and insight staff who design questionnaires and field surveys
 - Quality and process improvement staff who collect data through audits, checklists and observation
 - HR and employee experience staff who run staff surveys, interviews and focus groups
 - Planning and statistics staff who manage fieldwork teams and data collection schedules
-

Course Outline:

Day 1: Information Needs and Choosing a Collection Approach

- Decision Question to Information Needs Matrix
- Primary Versus Secondary Data Source Assessment
- Quantitative, Qualitative and Mixed Methods Selection Grid
- Variable List and Operational Definitions Template
- Data Collection Mode Comparison: Web, Telephone, Face-to-Face and Paper

Day 2: Survey Quality Frameworks and Sampling Designs

- Total Survey Error Framework: Coverage, Sampling, Nonresponse and Measurement Error
- ISO 20252 Research Process Quality Requirements
- Sampling Frame Construction and Coverage Checks
- Simple Random, Stratified, Cluster and Systematic Sampling Procedures
- Sample Size Calculation: Confidence Level, Margin of Error and Design Effect

Day 3: Questionnaire Construction and Qualitative Field Methods

- Question Wording Rules: Double-Barrelled, Leading and Loaded Items
- Likert, Semantic Differential and Rating Scale Design
- Questionnaire Flow, Skip Logic and Routing in Microsoft Forms, Google Forms and Qualtrics
- Semi-Structured Interview Guide and Focus Group Moderator Protocol
- Structured Observation Checklist and Field Note Template

Day 4: Pilot Testing, Response and Data Integrity Controls

- Cognitive Interviewing and Pilot Test Debrief Log
- AAPOR Standard Definitions for Response, Cooperation and Refusal Rates
- Nonresponse Follow-Up, Reminder Schedule and Weighting Adjustment Options
- Social Desirability, Acquiescence and Interviewer Effect Controls
- Informed Consent Form, Anonymisation Steps and the ICC/ESOMAR International Code

Day 5: Case Work: Data Collection Plan, Questionnaire and Codebook

- Workforce Survey Case: Repairing a Flawed Draft Questionnaire
 - Service Site Case: Designing an Observation and Intercept Interview Round
 - Codebook Build: Variable Names, Value Labels and Missing Value Codes
 - Raw Data Cleaning Log: Range, Consistency and Duplicate Checks
 - Data Collection Plan Assembly and Group Critique
-

Skills You Will Gain:

- Information Needs Scoping
- Questionnaire Construction
- Sampling Design
- Sample Size Estimation
- Interview and Focus Group Moderation
- Pilot Testing
- Survey Error Control
- Codebook Preparation

Why Attend This Course:

- Return with a Data Collection Plan, pilot-tested questionnaire and codebook that can be used on the next survey or study
- Spend less time rescuing unusable responses because wording, routing and sampling problems are caught before fieldwork
- Explain to sponsors how reliable the collected figures are, including response rate and likely sources of error
- Compare fieldwork practice with participants from other sectors who collect data from staff, customers and sites

Conclusion:

Good analysis cannot recover data that was badly collected. This course moves from turning a decision into information needs, through survey quality frameworks and sampling, to questionnaire wording, interviews, focus groups and observation, then to piloting, response management, bias controls and consent. The final day applies these methods to workforce and service site cases, producing a Data Collection Plan with a pilot-tested questionnaire and codebook that participants can use to gather evidence their organisation can rely on.
