

Table of Contents

Table of Contents

| | | |
|----------|---|----|
| 1 | Understanding how data matters | |
| 1 - 1 | What Data is in a Piece of Fruit | 7 |
| 1 - 2 | What is Data? | 10 |
| 1 - 3 | Data and Information Q&A | 20 |
| 1 - 4 | Why Data Matters | 33 |
| 1 - 5 | Personify Data | 50 |
| 1 - 6 | No Data Situation | 53 |
| 2 | Nurturing a Data Culture | |
| 2 - 1 | How to nurture a data culture – data socialisation? | 8 |
| 2 - 2 | Data Skills Scoping | 12 |
| 2 - 3 | Activity Plan for Workshops and Learning Sessions | 16 |
| 2 - 4 | Data Skills Scoping analysis | 20 |
| 2 - 5 | Informal Data Working Group Planning | 21 |
| 2 - 6 | Building a Data Culture (guidance for discussion) | 24 |
| 2 - 7 | Data Audiences at IFRC | 27 |
| 2 - 8 | Show and Tell – Data Stories | 30 |
| 2 - 9 | IFRC Digital Transformation Strategy | 32 |
| 2 - 10 | IFRC Digital Transformation Strategy (summary) | 37 |
| 2 - 11 | Digital Maturity Framework | 41 |
| 2 - 12 | GO Platform | 43 |
| 2 - 13 | FDRS Federation-wide Databank and Reporting System | 52 |
| 3 | Strengthening Data Teams and Projects | |
| 3 - 1 | Place Data-Driven Project Items in Order | 7 |
| 3 - 2 | The roles to support each step of the workflow | 10 |
| 3 - 3 | Data and Technology (Checklist) | 12 |
| 3 - 4 | Running a Datathon and Red Team | 22 |

| | | |
|---------------|-----------------------------------|-----------|
| 3 - 5 | Datathon Output | 26 |
| 3 - 6 | Datathon Output Analysis Template | 39 |
| 3 - 7 | Risk Register Template | 40 |
| 3 - 8 | Storyboard a simulation (part 1) | 41 |
| 3 - 9 | Storyboard a simulation (part 2) | 48 |
| 3 - 10 | Data Simulation | 53 |
| 3 - 11 | Data Impact Assessments | 58 |
| 3 - 12 | Data Responsibility Scenario | 70 |

4 Getting the Data We Need

| | | |
|--------------|--|-----------|
| 4 - 1 | Making decisions to get the data we need | 7 |
| 4 - 2 | Design a Bad Survey | 10 |
| 4 - 3 | Best Practices for Designing Surveys | 13 |
| 4 - 4 | Hands-on Review with External Data sets | 15 |
| 4 - 5 | Survey basics | 18 |
| 4 - 6 | Counting People - Handout | 30 |
| 4 - 7 | Household Survey Scenario | 37 |
| 4 - 8 | Using Spreadsheets Test | 41 |
| 4 - 9 | Mobile Data Collection and Data Protection | 42 |

5 Making Data Useful, Useable and Shareable

| | | |
|--------------|--|-----------|
| 5 - 1 | What do we know about our data users? | 7 |
| 5 - 2 | Standards support humanitarian action | 10 |
| 5 - 3 | Should We Apply Standards to Our Data? | 13 |
| 5 - 4 | Understanding data standards | 16 |
| 5 - 5 | Generating a Data Quality Checklist | 29 |
| 5 - 6 | Data Quality: Opportunities and Barriers | 32 |
| 5 - 7 | Data Quality Workflows | 34 |

| | | |
|----------|--|----|
| 5 - 8 | Dataset Check-In Process | 50 |
| 5 - 9 | Open Data Basics | 52 |
| 6 | Understanding and Analysing Data | |
| 6 - 1 | Description of the analysis spectrum | 7 |
| 6 - 2 | Unveiling the analysis spectrum | 11 |
| 6 - 3 | Mental shortcuts and thinking errors (exercise) | 14 |
| 6 - 4 | Background, field info and biases list (exercise material) | 17 |
| 6 - 5 | Proposed definition for analysis in humanitarian settings | 20 |
| 6 - 6 | Cognitive Biases in Humanitarian Analysis | 22 |
| 6 - 7 | Analysing Analysers | 23 |
| 6 - 8 | Unveiling the analysis spectrum (exercise material) | 27 |
| 6 - 9 | What is analysis in a humanitarian context? (exercise) | 30 |
| 6 - 10 | HIAC examples of analysis | 32 |
| 6 - 11 | Mapping the types of Analysis | 38 |
| 6 - 12 | Exploratory analysis, gaps and pitfalls (exercise) | 40 |
| 6 - 13 | Cidade Da Beira assessment (mock data set) | 43 |
| 7 | Responsible Data Practices and Data Protection | |
| 7 - 1 | Data Sharing Agreements (part 1) | 8 |
| 7 - 2 | Data Sharing Agreements (part 2) | 12 |
| 7 - 3 | Debate Club - Data Protection and Digital Risks | 14 |
| 7 - 4 | Understanding and identifying different kinds of data | 17 |
| 7 - 5 | Understanding the 'legal basis' when collecting and using data | 25 |
| 7 - 6 | In Their Shoes | 38 |
| 7 - 7 | Humanitarian Values & Data Protection | 41 |
| 7 - 8 | Humanitarian Values & Data Protection | 44 |
| 7 - 9 | What data do we really need? | 47 |
| 7 - 10 | What <i>can</i> we do vs. What <i>should</i> we do? | 50 |
| 7 - 11 | Data Protection nightmares | 53 |
| 7 - 12 | Would you Share it? | 55 |
| 7 - 13 | Data Hygiene Checklist | 59 |
| 7 - 14 | Wheel of Data Misfortune | 61 |

| | | |
|--------|------------------------------------|----|
| 7 - 15 | PMER Data Simulation | 65 |
| 7 - 16 | People Before Data (handout) | 68 |
| 7 - 17 | Polio Campaign Monitoring In Syria | 70 |
| 7 - 18 | Data Monologues | 73 |

8 Presenting and Visualising Data

| | | |
|--------|--|----|
| 8 - 1 | Data Makeovers | 7 |
| 8 - 2 | S-C-A-M-P-E-R | 12 |
| 8 - 3 | Data Visualisation Best Practices | 16 |
| 8 - 4 | Data Visualisation Overview | 17 |
| 8 - 5 | Data Gallery | 40 |
| 8 - 6 | Infographic Drawing | 43 |
| 8 - 7 | Translating Technical Concepts for Audiences | 47 |
| 8 - 8 | Data Sculptures | 51 |
| 8 - 9 | Infographic Design Best Practices | 54 |
| 8 - 10 | 10 Ideas to Visualise Qualitative Data | 55 |
| 8 - 11 | Iconography Interpretation | 56 |
| 8 - 12 | Understanding Different Types of Color Vision Deficiencies | 70 |
| 8 - 13 | Data Visualisation Accessibility Overview | 78 |
| 8 - 14 | Data Visualisation Accessibility Checklist | 96 |

9 Making Decisions with Data

| | | |
|--------|---|----|
| 9 - 1 | What is Evidence? | 8 |
| 9 - 2 | How to support data-informed decision-making? | 20 |
| 9 - 3 | Data, Decisions, and Strategy 2030 | 23 |
| 9 - 4 | Best Practices for Data-informed Decisions | 24 |
| 9 - 5 | Making Decisions with Data | 29 |
| 9 - 6 | Localising Data Workflows Checklist | 32 |
| 9 - 7 | Engaging local communities in data projects | 37 |
| 9 - 8 | How to Localise Data Workflow Exercise | 41 |
| 9 - 9 | State of data | 44 |
| 9 - 10 | Negotiating with leaders | 47 |
| 9 - 11 | How do we keep learning from decisions? | 51 |

| | | |
|----------------|--|-----------|
| 9 - 12 | Information Needs for Decision-making | 54 |
| 10 | Data Science and Emerging Technologies | |
| 10 - 1 | Humanitarian objectives through data science | 7 |
| 10 - 2 | Role of a volunteer data science team | 11 |
| 10 - 3 | What a Data Scientist job description might look like | 12 |
| 10 - 4 | Sustainable implementation processes and improve maturity | 13 |
| 10 - 5 | Data, Emerging Technologies & Sustainable Goals | 15 |
| 10 - 6 | Social Diversity, Equity and Inclusion | 21 |
| 10 - 7 | Mapping Aspects of Data Science Work | 26 |
| 10 - 8 | Why Do We Need Data Science | 29 |
| 10 - 9 | Help Decisions Given Specific Settings | 33 |
| 10 - 10 | High-Level Overview of Typical Data Science Platform and Processes | 38 |
| 10 - 11 | How to Implement a Data Science Model | 49 |
| 10 - 12 | Red Cross Churn analysis Jupyter Notebook | 52 |
| I | Curriculum Development Templates | |
| II | Data Playbook Credits and Thanks | |
| III | License | |
| IV | Designer's Note | |