



# Storytelling Through **Data Visualization**

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## **DATA PRODUCER**

Training Agenda

## INTRODUCTION

Data visualization is the presentation of data in a pictorial or graphical format. It enables decision makers to see analytics presented visually, so they can grasp difficult concepts or identify new patterns. With interactive visualization, you can take the concept a step further by using technology to drill down into charts and graphs for more detail, interactively changing what data you see and how it's processed. The resulting visuals are designed to make it easy to compare data and use it to tell a story – both of which can help users in decision making. Data is presented through the means of its visualization, and the visualization represents the medium, a way to explore, present and express meaning of data.

This Story telling through Data Visualization training course will teach the participants ways to effectively visualize the data, using different tools and techniques. Using Excel, PowerPoint and open-source visualization tool will be the basis of this training course, but the use of other software will also be discussed in depth through the training. The participants will learn how to incorporate statistics, design and aesthetics of both the data and the final visualization with reference to their specific field.

## OBJECTIVES

The objective of this training workshop is to demonstrate data interpretation and data visualization methods and tools and how it can be used for better planning, monitoring and evaluation and to create presentations: tables, graphs, maps. The sessions of this workshop are tailored for those working either in government or other organizations and having statistics and monitoring and evaluation background, termed as 'Data producers'. Basics of preparing data, data analysis, visualization and storytelling will be covered in this training workshop.

This workshop will prepare participants for the use of powerful mediums of visualization to identify trends, patterns and other hidden elements of the data they are working with. Further, the course aims at enhancing the knowledge of the participants in the proper process of creating the visual presentation of their data. The training will enhance participants' capacities to know what to think, when to think and how to think about all the analytical and design decisions involved in any data-driven communication.

The specific objectives are to train participants on:

- ❖ Interpreting and preparing data for analysis and management
- ❖ Presenting data for monitoring and evaluation purpose
- ❖ Visualization as a new lens for presenting facts, performance and progress of development indicators
- ❖ Using new methods and approaches for visualizing data, and
- ❖ Combining design-thinking with statistical consistency

The workshop will benefit the participants having experience in monitoring, evaluation and reporting on national data.

## WORKSHOP STRUCTURE

The duration of the workshop is six days – 2.5 hours per day. This working is designed to train those working either in government or other organizations and having statistics and monitoring and evaluation background by presenting underlying facts using easy to understand comprehensive visualizations. The workshop will help to:

- ❖ Interpret and prepare data from the statistics datasets for data analysis and fact finding.
- ❖ Manage data and its elements and use it for monitoring and evaluation.
- ❖ Report data using basic and advance visualizations.
- ❖ Design and develop the sector based thematic profiles to tell impactful data stories.
- ❖ Understand Sustainable Development Goals; reporting SDG progress by geography and time period.

## WORKSHOP FORMAT

The training workshop will use a state-of-the-art modular approach to conduct training sessions. The workshop will be divided into strategic sessions that will cover one objective each day. Thematic examples will be used to present and learn the objectives each day. Each thematic topic will be presented through

## Training Agenda – Data Producer

demonstration, step-by-step and hands-on exercises. Presentations, quiz, hands-on workbook exercises and Q&A sessions will help consolidate the learning.


## DETAILED AGENDA

### DAY 1 - MONDAY, 02 NOV 2020

To understand the fundamentals, benefits and importance of data storytelling and data visualization.

**15h00 – 15h30**


#### Opening Session

 30 min.

- Opening remarks by Mr. Gerald Daly, UN Resident Coordinator, Remarks by Mr. Chhime Tshering, Director of National Statistics Bureau.
  - Objectives of the training and, expected outcomes
    - Participants introduction

**15h30 – 16h00**


#### Introduction to Data Storytelling

 30 min.

- Benefits of storytelling through data visualization
  - Understanding the data
  - Importance of context
  - Choosing the right data

**16h00 – 16h45**


#### Introduction to Data Visualization

 45 min.

- Principles of data visualization
- Good, Average and Poor examples of visualization
  - Data visualization elements

**16h45 – 17h30**

#### Introduction to Data Visualization

 45 min.

- Hands on session

## DAY 2 - TUESDAY, 03 NOV 2020

To learn how to interpret the data and its dimensions, prepare the data and metadata templates.

15h00 – 15h30

### Review Session

 30 min.

- Revision of Day 1

15h30 – 16h00

### Interpreting and Preparing Data

 30 min.

- Data and its dimensions
- Data elements characteristics and their attributes
  - Identify IUS (Indicator – Unit – Subgroup)
    - Creation of IUS list

16h00 – 16h30

### Interpreting and Preparing Data

 45 min.

- Hands on session

16h30 – 17h00


### Introduction to Metadata

 30 min.

- Data and its metadata
- Understanding metadata tags
- Metadata management

17h00 – 17h30

### Introduction to Metadata

 15 min.


- Hands on session

## DAY 3 - WEDNESDAY, 04 NOV 2020

To understand and learn using open-source Data Management Tool and its features.

**15h00 – 15h30**


**Review session**

 30 min.

Revision of Day 2

**15h30 – 16h00**


**Introduction to Data Management Tool**

 30 min.

- Introduction to Area, Indicator and Metadata management
  - Data Source management
  - Introduction to Data Entry Tools

**16h00 – 16h30**


**Introduction to Data Management Tool**

 30 min.

- Hands on session

**16h30 – 17h00**


**Using Open-source Data Management Tool**

 30 min.

- Introduction to Open-source Data Management Tool
- Understanding the Data Management modules

**17h00 – 17h30**

**Data Management Tool**

 30 min.


- Hands on session

## DAY 4 - THURSDAY, 05 NOV 2020

To know about the data visualization tools, create charts and graphs and develop thematic data profiles using MS Excel.

15h00 – 15h30


### Review Session

 30 min.

- Revision of Day 3

15h30 – 16h00


### Tools of Data Visualization

 30 min.

- Best practices to design visualization
- Various chart types – Basic and Advance
- Create charts and present thematic story using Excel and PowerPoint

16h00 – 16h15


### Tools of Data Visualization

 15 min.

- Hands on session

16h15 – 17h00


### Introduction to Thematic Data Profiles

 45 min.

- What are Thematic Data Profiles and their use?
- Best practices to develop Thematic Data profiles
- Design and Develop Thematic Data profiles

17h00 – 17h30

### Thematic Data Profiles

 30 min.

- Hands on session




## DAY 5a - FRIDAY, 05 NOV 2020

To learn and use open-source data visualization tool, create thematic gallery of presentation objects, data dashboard and thematic maps.

10h30 – 11h00


Review session

 30 min.

Revision of Day 4

11h00 – 11h30


Creating Thematic Maps

 30 min.

- Overview of Thematic Maps
- Learn various Map Theme types
- Create and present Thematic Maps

11h30 – 12h15


Using Open-Source Data Visualization Tools

 45 min.

- Introduction to open-source Data Visualization tools
- Data Visualizer tool and its features - Quick Data, My Gallery and My Dashboard
  - Create Thematic Galleries and Dashboard using Data Visualizer tool

12h15 – 13h00

Using Open-source Data Visualization Tools

 45 min.

- Hands on session

## DAY 5b - FRIDAY, 05 NOV 2020

To understand Sustainable Development Goals, framework and indicators, create SDG progress report and thematic presentations.

15h00 – 15h30

Review session

 30 min.

- Revision of Day 5

15h30 – 16h00

Presenting SDGs using data visualization

 30 min.

- Understanding global and national data sources
- Interpreting SDGs – Goals, Targets and Indicators
  - Creating a SDG based story line

16h00 – 16h30


Developing SDG Progress Report

 30 min.

- Using global and national data to develop SDG Progress Report
  - Prepare data and create SDG Progress Report

16h30 – 17h15


Create and Present Thematic Presentation

 45 min.

- Each participant will be assigned to develop a SDG Progress Report

17h15 – 17h30

Closing Remarks

 15 min.