





# Data Literacy for Journalists

### Background

Data is an essential element in deriving insight into something. In journalism, the incorporation of data in story articles is widely adopted for it allows one to discover and communicate the truth in a compelling way. To produce data-driven journalism pieces, data skills such as data collection and analysis are prerequisite. However, working with data might be a major challenge for journalists to embrace data-driven story production.

As an organization promoting open data, ODC recognizes the challenge and need for journalists to obtain data skills to produce data stories. For this reason, ODC is preparing a training program on Data Literacy for Journalists intended to fill the capacity of journalists to produce data stories.

This training program is part of the Innovation for Social Accountability (ISAC) project in collaboration with FHI 360 and funded by USAID.

### **Objectives**

The training aims to equip enthusiastic students majoring in journalism and media with the skill to produce compelling data-driven stories on **issues around social accountability**. The course will cover seven sessions:

- 1. Fundamental Understanding of Data.
- 2. Introduction to Feature and Investigative Story Production
- 3. Guiding Principles of Data Journalism
- 4. Exploring Data Sources
- 5. Data Scrapping, Manipulation, and Analysis for Story Production
- 6. Data Visualization for Journalism
- 7. Guides to Human Interview for Data Story
- 8. Organizing and Communicating the Data Story

This training is a four-day program split into 2 phases of which the first phase will take place on 15-16 Aug and on 22-23 Aug for the second phase.

#### Who is this training intended for?

- Professional or media journalism students
- Enthusiastic journalists who would like to explore the data journalism field.
- Journalists who are willing to explore new skills to elevate the story production to the next level.

#### What will you gain from this training?

- Learn new skills in Data Journalism which is essential to elevate future career as a professional journalist.
- Be exposed to the actual tasks of story production.





- Gain experience in producing data stories to add to your portfolio.
- Expand the capabilities to produce data-driven stories.
- Get the opportunity to apply for the story production grant.
- Receive mentorship support for the story production once receiving the grant.

### Who is eligible to apply for this training?

- Being a professional journalist or students studying media and/or journalism is a must.
- Being enthusiastic about learning and applying new skills.
- Having at least basic knowledge and skill in using data and spreadsheet tools such as MS Excel and/or Google Sheets.
- Being interested or seeking to produce stories around the social accountability sector.
- Having the commitment to complete the four-day training courses.
- Having a basic understanding of English language/be able to read and write in English.

# How to apply

Please register via this link. The applicants will be shortlisted, and the successful candidates will be announced on the ODC FB post and informed individually via email.

Interested applicants are requested to fill in the application form by 5:00 p.m. on 05<sup>th</sup> August 2024.

# About Training Sessions

#### Session 1: Fundamental understanding of data

To begin data journalism journey, understanding data concept is essentially a prerequisite. This session allows the participant to relate data to reality, and to understand technical aspects of data. In addition to understanding data concepts, the participant will learn to recognize data indicators necessary for measuring and monitoring issues related to the story.

This session helps the participant response to the bellowed questions:

- What is data? What is the relationship between data and reality?
- What kind of data do we commonly work on?
- What data indicator allows you to answer questions about an issue?

#### Session 2: Introduction to Feature and Investigative Story Production

Data journalism refers to feature or investigative story production that is data-centric where the insight was significantly relied on data sources. Thus, it is crucial to master the process of feature story production skill prior to producing data story.

This session the participant to understand the process of how a feature, or investigative pieces are produced and what requirement each individual journalist needs to fulfill to meet





the standard of the story. This session will be facilitated by a Cambodian investigative journalist expert from INTERNEWS.

This session helps the participant response to the bellowed questions:

- What is the feature story? What is the difference between feature story and hot news?
- How could a feature story be produced?

# Session 3: Guiding Principles of Data Journalism

Understanding data journalism process and workflow is crucial to successfully produce a compelling data story. The key to producing a good story is to begin with a story hypothesis and the means to prove it. In this session, the participant will learn the importance of gathering context and background of the issue that are necessary for developing a hypothesis for a story and learn to form the right questions to prove using data.

This session helps the participant response to the bellowed questions:

- What is data journalism?
- What is the process of data journalism?
- What is a story hypothesis? And how to develop one for a story?

# **Session 4: Exploring Data Sources**

Although identifying data indicators to measure an issue is important, it is equally essential to know if the data exists and find and access the available dataset. Commonly, various datasets are aggregated and stored in a portal which is usually publicly accessible.

This session introduces to the participants the process of finding data online from various public domains and data portals. The participants will learn to find relevant resources using Advanced Google Search. In addition, they will be introduced to local and international data portals such as Open Development Cambodia, NIS, World Bank, and Our World in Data and learn to navigate these portals to access desirable data for the story production.

This session helps the participant response to the bellowed questions:

- Where could you find open data and public resources related to your story?
- How could you access those resources in the portal?

# Platforms to be accessed:

- Open Development Cambodia (ODC)
- National Institute of Statistics (NIS)
- World Bank Open Data
- Our World in Data

# Session 5: Data Scrapping, Manipulation, and Analysis for Story Production

The essence of data journalism concerns the extracting of insightful information from data. Thus, data skills such as data scrapping, data cleaning and analysis are of significantly important.





This session covers the entire process from data scrapping, data cleaning, manipulating data to data analysis after the data acquisition. The participant will be instructed to practice data scrapping using Tabula program and proceed to cleaning using Google Sheets.

Next process, the participant will learn to carry out the analysis to answer the questions that are necessary for proving the hypothesis and writing the narratives. In this part, the participant will be introduced to basic statistics, conduct simple analysis using Google Sheets functions, and conduct data crunching for complex analysis using Pivot Table in Google Sheets.

This session helps the participant response to the bellowed questions:

- If you get data in PDF format, how can you transform it into CSV format using Tabula?
- How could you clean the data using Google Sheets?
- How could you analyze data using Pivot Table in Google Sheets to answer the questions of hypothesis?

Tools:

- Tabula (Data Scrapping)
- Google Sheets (Data Cleaning, Data Analysis)

### Session 6: Data Visualization for Journalism

The key to communicating the story effectively is through visualization for it allows one to see patterns and distribution that offer clear communication of insight into an issue. This session covers the entire process of data visualization (Data Viz) from defining purpose to visualization design. The participant will learn to purposefully choose the right visual type for the visualization, gain practical experience in producing chart using Flourish, and learn how to design a compelling visualization that effectively communicate to the audience and have ecstatic value.

This session helps the participant response to the bellowed questions:

- What is Data Viz? And why does it matter in your story?
- How to choose the right visual type?
- How to produce charts using Flourish?
- How to design your viz to effectively communicate insight to your readers?

Tool:

- Flourish (Data visualization)

### Session 7: Guide to Human Interview for Data Story

After getting the data findings from the analysis, it is important to make use these findings to leverage insights from human sources to make the story complete. This session covers the process of forming human interview questions driven by data findings. The participants will learn to synthesize findings and develop further questions for human source interview to validate, verify and gain more insight of the story.

This session helps the participant response to the bellowed questions:

- How to form questions for human sources interview based on the analysis findings?





- What are the four types of human interview for the data story?

# Session 8: Organizing and Communicating the Data Story

After the insights were gathered from the analysis and interview, it is important to organize the flow of the story and humanize the insight to make it relatable to the audience. This session covers the whole process of organizing data stories for communicating to the public audiences. The participant will learn to make the data findings meaningfully accessible to the public audience by humanizing and simplifying the information. Then the participant will learn to structure and organize the data finding and the interview-driven information to define the flow of story that are necessary for the drafting.

This session helps the participant response to the bellowed questions:

- How to make your data findings simple and relatable to your readers?
- How to structure and organize data findings and the interviewed information into a full story?

For more information, please contact:

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