Session 4: Good practices in the use of data storytelling and data visualizations in VNR reports

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UN Statistics Division | SDGs Monitoring Section

Workshop on supporting evidence-based VNRs and SDG reporting: data and statistics innovations
Ankara, Türkiye | 7 December 2023
A Data Roadmap for VNRs

- **Preparation & Planning**: OCT-NOV
- **Data Collection**: JAN-MAR
- **Data Incorporation**: MAR-MAY
- **Presentation & Post-analysis**: JUN-JUL+

[Practical Guide for Evidence-Based Voluntary National Reviews](https://unstats.un.org/sdgs/data4vnrs/)
Step 4

Data Incorporation

- Preparing the narrative and communicating data
- Including a Statistical Annex and SDG data platform

MAR-MAY
Data Roadmap: Data Incorporation

• Preparing the Narrative: supported by statistics in tables and charts

• Data Storytelling & Data visualization

• Progress charts, Statistical Annex, SDG data platforms: methodologies and visualization


## Introduction

Better Data Visualizations
by Jonathan Schwabish (pg. 4)

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Revenues as a Percentage of GDP</th>
<th>75 Year Present Value as a Percentage of GDP</th>
<th>Trust Fund Exhaustion Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revenues</td>
<td>4.9</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>Outlays</td>
<td>5.2</td>
<td>6.3</td>
</tr>
<tr>
<td></td>
<td>Balance</td>
<td>-0.3</td>
<td>-0.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Change in Revenues, Outlays, and Balances as a Percentage of GDP</th>
<th>Change in 75 Year Present Value as a Percentage of GDP</th>
<th>Change in Trust Fund Exhaustion Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase the Payroll Tax Rate by 1 Percentage Point in 2012</td>
<td>Revenues: 0.4, Outlays: *, Balance: 0.4</td>
<td>Present Value: 0.3</td>
<td>Trust Fund: XX</td>
</tr>
<tr>
<td>Increase the Payroll Tax Rate by 2 Percentage Points over 20 Years</td>
<td>Revenues: 0.3, Outlays: *, Balance: 0.3</td>
<td>Present Value: 0.5</td>
<td>Trust Fund: YY</td>
</tr>
<tr>
<td>Increase the Payroll Tax Rate by 3 Percentage Points over 60 Years</td>
<td>Revenues: 0.2, Outlays: *, Balance: 0.2</td>
<td>Present Value: 0.5</td>
<td>Trust Fund: ZZ</td>
</tr>
<tr>
<td>Eliminate the Taxable Maximum</td>
<td>Revenues: 0.8, Outlays: *, Balance: 0.8</td>
<td>Present Value: 0.9</td>
<td>Trust Fund: AA</td>
</tr>
<tr>
<td>Raise the Taxable Maximum to Cover 90% of Earnings</td>
<td>Revenues: 0.3, Outlays: *, Balance: 0.3</td>
<td>Present Value: 0.4</td>
<td>Trust Fund: BB</td>
</tr>
</tbody>
</table>

Author's rendering of early draft of exhibit from the Congressional Budget Office.
Introduction

Better Data Visualizations
by Jonathan Schwabish (pg. 6)

One-page infographic about the 2012 Long-Term Budget Outlook from the Congressional Budget Office.

Source: Congressional Budget Office.
Introduction
A curved line with every point equal distance from the center
Example from: link
Data Storytelling
What is data storytelling?

Data storytelling is a multidisciplinary process that combines the results of data analysis with compelling narratives and presents the combination via text and visuals to inform, engage, and influence the audience.

Source: Venngage Data Storytelling Benchmark Report 2021

Data storytelling components

Data
• Collection
• Exploration
• Analysis

Design
• Visualisation
• Creation

Narrative
• Messaging
• Structure
• Language

Context
• Audience
• Communications goals

Source: [Venngage Data Storytelling Benchmark Report 2021](#)
Data stories come in many shapes, forms, and sizes

- Report
- Article
- Presentation
- Infographics
- Chart
- Webpage
- More

SDG content is dense and heavy by nature

- Numbers
- Geographies
- Topics
- Terminologies
VNRs and SDG data stories have a broad audience

Different groups of users have different requirements and different levels of expertise – we need to recognize this through our outputs

- **Engaged citizen**: I want to easily find out what the Goals are and how we’re doing
- **Policy makers**: I want to quickly access clear visualisations I can share
- **Government and NGOs**: I need the latest data on indicator 8.5.2 for my report
- **Expert data users**: I want to be able to download the data in an accessible format

Adapted from: UNSD FCDO Project user engagement
What are the objectives of data storytelling in SDG and VNR reporting?

Immediate objectives:
- Present patterns and trends
- Share insights and observations
- Influence perceptions
- Generate actions

Long-term objectives:
How to make VNR SDG materials friendlier to the audience

**Keep it simple**
- Create a crisp storyline (key message + ≤3 core arguments)
- Write a clear, powerful title
- Minimize the use of jargon
- Use visuals strategically

**Bring a perspective**
- Present insights identified in the data
- Show “what” and “so-what”
What do you need for your data story?

Locate a story in the data

Develop a SMART data story title

Include key messages
How to locate a story in data

1. Identify trends and patterns
2. Draw comparisons
3. Look for correlations
4. Check on outliers
How to write a data story title

**SMART** rule

- **Specific**
- **Measurable**
- **Action-oriented**
- **Relevant**
- **Time-bound**
Clear, powerful titles reduce the cognitive load on the audience.

Source: Economist

Source: NY Times
What is the story?

• **Trends and patterns**: Compare Global 2020 with Global 2000 to highlight progress

• **Comparisons and correlations**: Oceania, Sub-Saharan Africa, and Central and Southern Asia vs. the rest. Why? Are children more vulnerable in these regions hence demand more attention?

• **Outliers**: Oceania is the only region that has higher stunting statistics in 2020 than in 2000. Why?

➢ **Activity**: Finding a Story worksheet (Datatherapy.org- link)

How to write the key message

1. Construct the key message as a big idea
   - What is at stake?
   - What will the future look like?
   - How does it compare with the past situation?
   - Trends and patterns

2. Provide essential information
   - Who
   - What
   - Where
   - When
   - Why
   - How

3. Show the meaning of data
   - Highlight the insights identified in the data
   - Summarize the core statistical finding
Example: Data stories in UK VNR

**The Data Picture: Pensioner poverty**

*Coverage: UK*

*Average pensioner incomes* have grown significantly in real terms over the last two decades (average weekly income in 1994/95 was £161 a week in 2017/18 prices, compared to £304 a week in 2017/18), driven by increases in the contributory basic state pension and the level and increases in the means-tested benefit, as well as increases in income from occupational pensions.

Rates of poverty for pensioners have remained stable between 2015/16 and 2017/18, except for relative BHC rates which have increased.

*Percentage of pensioners in poverty: 2009/10 to 2017/18*

*Source: Department for Work and Pensions, HBAI 2017/18*

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**The Data Picture: National Living Wage**

*Coverage: UK*

Recent changes mean that a single person on the National Living Wage will, from April 2019, take home over £13,700 a year after income tax and National Insurance — £4,500 more than in 2009/10 (not adjusted for inflation).

**National Living Wage as a proportion of median hourly salary (workers aged 25+ over time): 1999 to 2019**

*Source: Low Pay Commission, National Minimum Wage: 2018 report*
Example: Data stories in Canada VNR
General writing tips

- Put key message first.
- One paragraph, one idea.
- Start a paragraph with a topic sentence.
- Write short sentences.
- No more than 3 sentences in one paragraph.
- Use headlines, headings, subheadings, bold text, and bullets.
- Use active voice.
- Use appropriate verbs.
- Minimize the use of jargon.
- Minimize the use of acronyms.
- Try not to use long words.
- Avoid redundancy.
Think beyond storytelling

- Set the communications objectives upfront
- Develop the narrative before visualizing data
- Connect with the audience at their level of data literacy
- Promote and advocate for your data stories with a plan
Data Visualization
The Lifecycle of Ideas
(Giorgia Lupi)

Data Viz Catalogue

Traditional Visualization:
Charts, Graphs, etc.

Non-traditional Visualization, Xenographics

Interactive:
Platforms, Storymaps

Qualitative data Visualization

Maps, Geospatial Information

Estonia Tree of Truth

SDG Report 2022

Infographics

Maps and data viz

See a Map of Data Viz
Data Visualization good practices

**Better Data Viz Guidelines:**
- Show the Data
- Reduce the clutter
- Integrate graphics and text
- Avoid the Spaghetti chart
- Start with grey

**Guide to Information Graphics Chart creation:**
- Research
- Edit
- Plot
- Review

**UNSD Guidelines:**
- Understand the data
- Understand the audience
- Develop key messages, short summaries and headlines
- Choose accurate visuals
- Feedback, review/revise

(Jonathan Schwabish)  
(Dona Wong)  
(UNSD for SDG Reports)
Data Viz in VNRs: Charts, graphs, data tables

- Clean axes, simple, concise, etc.
- Draw attention intentionally, i.e. (add explainers)
- Direct your readers attention with “pre-attentive” attributes (i.e. color, enclosure, etc.)
- Avoid misleading: axis at 0 (bar charts)
- Data Tables: sorting, shading, color and white space, concise info.
- Pie charts with right angles, clockwise
"Pre-attentive" attributes

Examples of preattentive attributes that we can use in our visualizations to direct our reader’s attention.

Data Tables

Suriname 2022 VNR
Data Viz in VNRs: Color & Design

- **Consistent chart design**: layout, typography, color choices
- Hues and values depending on the relationship
- Color palette for charts: Basic color + 3-5 shades of each hue (Dona Wong)
- Don’t use multiple colors/rainbows to represent the same kind of data (Dona Wong)
Data Viz in VNRs: Icons/Infographics

Why infographics are helpful:
- Makes data easy to digest
- Helps identify patterns
- Helps narrate a broader story
- Makes data more memorable
- Easier to focus on interesting trends
- More reader-friendly than regular charts/pies

Good practices:
- Know target audience
- Keep it simple and easy to review
- Focused: one topic a time
- Focus on the flow: streamlined
- Create your short key messages with data
- Work with graphic designers or easy-to-use tools and programs
- Choose appropriate icons
- Balance visual and written information: collaborate with others and look for data visualization inspiration
- Review and revise

SDG & COVID-19 Data Visualization Toolkit
SDG INFOGRAPHICS IN VNRs

Bharatmala
- 25,000 km: Roads to be developed in Phase I
- 10,855 km: Construction of National Highways in 2018-19 compared with 4,410 km in 2014-15
- 29.7 km/day: Road construction pace increased in 2018-19 from 17 km per day in 2015-16
- INVESTMENT: Investment in sector increased more than three times between 2014-15 and 2019-19

Sagarmala
- 1514 million tonnes: Cargo handling capacity of major ports in 2019 increased from 801 million tonnes in 2014-15
- 2.48 days: Turnaround time of ships improved in 2018-19 from 4.87 days in 2010-11

Vayumarg
- 0.12 seats: Annual seats per capita
- 147.1 million: Passengers in scheduled Indian airlines in 2017-18 increased from 103.8 million in 2015-16

Source: UAE 2022 VNR

Source: India VNR 2020: Decade of Action Taking SDGs from Global to Local
SDG INFOGRAPHICS IN VNRs

POLITICAL SUBJECTS

7,258 CANDIDATES

3,058 WOMEN

4,200 MEN

TOTAL NUMBER OF REPRESENTATIVES ELECTED TO THE HOUSE OF REPRESENTATIVES OF THE BIH PARLIAMENTARY ASSEMBLY

42 REPRESENTATIVES

7 WOMEN

35 MEN

TOTAL NUMBER OF REPRESENTATIVES ELECTED TO THE HOUSE OF REPRESENTATIVES OF THE FBiH PARLIAMENT

98 REPRESENTATIVES

27 WOMEN

71 MEN

WOMAN ELECTED TO CHAIR THE BIH COUNCIL OF MINISTERS FOR THE FIRST TIME

COUNCIL OF MINISTERS 2022-2026 COMPRIS
8 MEN (88%) 1 WOMAN (12.12%)

Source: Bosnia and Herzegovina 2023 VNR
# Data Viz in VNRs: Qualitative data

- Icons, Icon arrays
- Word clouds/specific words
- Word trees
- Quotes, etc.
- Heat Map

## Pure Qualitative

<table>
<thead>
<tr>
<th>Highlight a Word</th>
<th>Thematic Analysis</th>
<th>Highlight a Word</th>
<th>Thematic Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolded Words</td>
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<tr>
<td>Quote &amp; Pic</td>
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<tr>
<td>Call Out Box</td>
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<td>Change Photos</td>
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<td></td>
<td></td>
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<tr>
<td>Network Map</td>
<td></td>
<td></td>
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<tr>
<td>Diagrams</td>
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<tr>
<td>Timeline</td>
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<tr>
<td>Journey Map</td>
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<tr>
<td>Word Cloud</td>
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<td></td>
</tr>
<tr>
<td>Icons &amp; Color</td>
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<td></td>
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<tr>
<td>Spectrum Display</td>
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<tr>
<td>Heat Map</td>
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<tr>
<td>Harvey Balls</td>
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<td>Histogram</td>
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<td>Bubble Chart</td>
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<td>Gauge</td>
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<td></td>
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<tr>
<td>Venn</td>
<td></td>
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</tr>
</tbody>
</table>

*Source: Qualitative Chart Chooser, Evergreen Data (Qualitative Data)*
Common characteristics in the VNR statistical annexes include data tables containing:

- Baseline year and data information
- Current status and year (of the data)
- Established goals for 2025/2030
- Projections
- Disaggregated data
- Data sources
- Charts and/or other data/progress visualizations (with legends as applicable)

### Statistical Annex

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.1 By 2030, eradicate extreme poverty for all people everywhere</td>
<td>1.1.1 Poverty rate below the national poverty line, by sex, age, ethnicity and geographical location (urban/rural)</td>
<td>2015</td>
<td>9.1%</td>
<td>2019</td>
<td>0.8%</td>
<td>(see Goal 1)</td>
</tr>
<tr>
<td>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions, according to national definitions</td>
<td>1.2.3 Poverty rate below the national poverty line, by sex and age</td>
<td>2015</td>
<td>9.1%</td>
<td>2019</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>1.3 Implement nationally appropriate social protection systems and measures for all, including social safety nets, and by 2030 ensure universal coverage of the poor and the vulnerable</td>
<td>1.3.1 Proportion of population covered by social protection programmes, by sex, and including those living in poverty in all its dimensions, according to national definitions</td>
<td>2014</td>
<td>117%</td>
<td>2016</td>
<td>211%</td>
<td></td>
</tr>
<tr>
<td>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and other forms of property, inheritance, natural resources, appropriate health and financial services, and social protection</td>
<td>1.4.1 Proportion of population living in households with access to basic services</td>
<td>2014</td>
<td>91%</td>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure to shocks and human and natural disasters, including extreme events and other economic, social and environmental stresses and disasters</td>
<td>1.5.2 Civilian economic losses attributed to disasters in relation to gross domestic product (GDP)</td>
<td>2012</td>
<td>0.17%</td>
<td>2015</td>
<td>0.2%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Republic of Seychelles 2020 VNR
1. **End Poverty in All Its Forms Everywhere**

   **01.10. People at risk of poverty or social exclusion (% of the population)**

   Relative share of the population at risk of poverty or social exclusion as a % of total population. The indicator corresponds to the persons who are at risk of poverty after social transfers; severely materially deprived or living in households with unemployed persons and with very low work intensity. Persons are counted only once even if they are affected by more than one of these phenomena.

   Source: Bulgaria 2020 VNR
   (Bulgaria Annex on Statistical Monitoring)

   **01.20. People at risk of income poverty after social transfers (% of the population)**

   Relative share of the population with an equivalized disposable income (after social transfers) below the risk-of-poverty threshold, which is set at 60% of the national median equivalized disposable income.

   Source: Bulgaria 2020 VNR
   (Bulgaria Annex on Statistical Monitoring)

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**STATISTICAL ANNEXES IN VNRs**

**Source: Ukraine 2020 VNR**

<table>
<thead>
<tr>
<th>TARGET</th>
<th>INDICATOR</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Target Status</th>
<th>2020 Target</th>
<th>2025 Target</th>
<th>2030 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.1. Mobilize additional financial resources by promoting foreign and domestic investment</td>
<td>17.1.1. Ratio of private remittances from abroad to GDP, %</td>
<td>7.8</td>
<td>8.1</td>
<td>8.2</td>
<td>8.5</td>
<td>7.8</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>17.2. Net foreign direct investment (excluding financial flows, USD billion)</td>
<td>17.2.1. Net foreign direct investment (excluding financial flows, USD billion)</td>
<td>3,012</td>
<td>3,208</td>
<td>2,563</td>
<td>2,380</td>
<td>2,422</td>
<td>10,000</td>
<td>16,000</td>
<td>17,500</td>
<td></td>
</tr>
<tr>
<td>17.3. Consistently reduce the debt burden on the economy</td>
<td>17.3.1. Ratio of gross external debt to exports of goods and services in current terms, %</td>
<td>246.8</td>
<td>244.6</td>
<td>243.3</td>
<td>180.0</td>
<td>192.0</td>
<td>-</td>
<td>To be clarified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.3. Develop a partnership between government and business to achieve the SDGs</td>
<td>17.3.1. Number of projects of public-private partnership</td>
<td>177</td>
<td>186</td>
<td>191</td>
<td>189</td>
<td>187</td>
<td>215</td>
<td>To be clarified</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Definition of this target value used preliminary 2015 data, being 5.7%, as a baseline.

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**Source: Malawi 2022 VNR**
Data Viz in VNRs: Progress Charts

- Baseline year
- Indicator and target information
- Trends
- Status
- Data sources
- Clear legend
- Link to the technical note *(very important!)*

Source: Montenegro 2022 VNR
Resources
OVERVIEW INFOGRAPHICS IN THE SDG REPORTS—OUR PROCESS

✓ Make sure the data is correct
✓ Review key messages to ensure they are clear and concise
✓ Explore/experiment with icon and/or graph options for each key message
✓ Get feedback, review and revise x 100,000 times (estimated)
OVERVIEW INFOGRAPHICS IN THE SDG REPORTS—UNSD LESSONS LEARNED

❖ Focus the messages: even though it is a Goal overview, limit to the most important points

❖ Simple is better: the icons and visual concepts should appeal to a large, universal audience and should therefore be as simple and understandable as possible

❖ White space is a good thing: it helps create separation and appeals to the eye (to keep in mind for icons and text)

❖ Don’t be afraid to experiment: try other types of charts/graphs

❖ Focus on being data-driven

See Overview Infographics in The SDG Report 2022
ICONS & TEMPLATES

SDG & COVID-19 DATA VISUALIZATION TOOLKIT

UNSD-FCDO Project on SDG Monitoring
September 2021

SDG & COVID-19 REPORT TEMPLATES

The Global Pandemic Is Exacerbating World Hunger

Worldwide, an additional 83-342 million people are likely to have experienced hunger as a result of the pandemic in 2020.

COVID-19 has led to the first rise in extreme poverty in a generation

Before the COVID-19 pandemic, the share of the world’s population living in extreme poverty was expected to be reduced to 5.3% in 2020 from 5.7% in 2015. The pandemic is estimated to increase extreme poverty by 2.2 to 3.6%. The number of people living in extreme poverty in 2020 could range between 600 and 800 million people. The forecast is based on assumptions of an initial 6-8 months of lockdown followed by a rapid economic recovery.

Working poverty disproportionately affects women and youth, and the pandemic is likely to deepen these disparities

The share of the world’s workers living in extreme poverty fell from 8.6% in 2014 to 6.8% in 2018. The pandemic is expected to push an additional 250-500 million workers into working poverty. The number of working poor is projected to increase to 3.3 billion by 2020 from 3.1 billion in 2018.

The Global Amplification Inequality

The global amplification of inequality and poverty is estimated to reach 1.3 billion people by 2018, increasing the number of working poor by 500 million people and 500 million people living in extreme poverty.

Adobe InDesign Files

Word File

Chart/Graph Title or Headline

Chart/Graph or icons

Chart/Graph Title or Headline

Chart/Graph or icons

Chart/Graph

Chart/Graph
BROCHURE TEMPLATES

Adobe Illustrator Files

16%
The average global share of urban area allocated to streets and open public spaces.

Short of the target of 30% streets and 10-15% open public spaces.

SUSTAINABLE CITIES AND COMMUNITIES

For more information, please visit: https://ourweb.org/our報告/2021

16%

Powerpoint Files

SUSTAINABLE CITIES AND COMMUNITIES

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras et sem tristique, luctus purus.

For more information:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras et sem tristique, luctus purus.

TITLE OF THE BROCHURE

For more information:

Logo or other
The annual report reviews progress of the 2030 Agenda for Sustainable Development, using the latest available data and estimates to track global progress of the 17 Goals with in-depth analysis of selected indicators for each Goal. The report highlights the devastating impacts of COVID-19 on the SDGs and points out areas that require urgent and coordinated action. The report is prepared by UN DESA in collaboration with more than 50 international and regional organizations.
How to analyse your audience

Some key questions for audience analysis:

• Who are the audiences?
• How is the data story relevant to the audiences?
• Why do the audiences need the information?
• How will the audiences use the information?
• What role(s) do the audiences play (decision making, influencing, or information gathering)?
• What data is available that would support the storytelling needed by the audiences?
• What do you need your audiences to do with the data story?
• How experienced are the audiences with data and the data story (laymen versus fluent)?
• What do the audiences care about in the data story (microdata, metadata, key figures, key messages, explanatory texts, guidance on how to understand statistics, insights for sharing, or in-depth analyses)?

How to structure a data story—Inverted Pyramid Model
How to structure a data story—Pyramid Model
Print writing and web writing are different

<table>
<thead>
<tr>
<th>Print content is</th>
<th>Web content is</th>
</tr>
</thead>
<tbody>
<tr>
<td>passive</td>
<td>active</td>
</tr>
<tr>
<td>linear</td>
<td>interactive</td>
</tr>
<tr>
<td>Slow</td>
<td>fast</td>
</tr>
<tr>
<td>detailed</td>
<td>concise</td>
</tr>
<tr>
<td>complete</td>
<td>Complete or fragmented</td>
</tr>
</tbody>
</table>
Resources: Data Storytelling

Data storytelling

- Data Storytelling in Marketing: Venn Benchmark Report 2021
- Data Storytelling: The Essential Data Science Skill Everyone Needs
- [https://www.nugit.co/what-is-data-storytelling/](https://www.nugit.co/what-is-data-storytelling/)
- [https://narrativescience.com/data-storytelling/](https://narrativescience.com/data-storytelling/)
Resources: Data Storytelling

Context and audience

- Purdue Online Writing lab
- https://style.ons.gov.uk/category/writing-for-the-web/personas/

Writing

- Style.ONS: A guide to writing about statistics
- https://datajournalism.com/
- https://training.npr.org/2016/10/12/leads-are-hard-heres-how-to-write-a-good-one/
- https://www.clearvoice.com/blog/the-dos-donts-of-writing-a-good-lead-according-to-dear-megan/
- Story Structure: 7 Narrative Structures All Writers Should Know
Resources: Data Visualization

Data Viz Overview:
- Do’s and Don’ts of Data Visualization (European Environment Agency)
- Data Visualization Toolkit (basic)
- Data Visualization: A practical introduction (Kieran Healy)
- Top 10 Data Visualization Best Practices (visme.co)
- Chartio: 5 Data Visualization Best Practices: The Secrets Behind Easily Digestible Visualizations
- GoodData: 5 Data Visualization Best Practices
- Data Visualization – Best Practices and Foundations
- Data visualization: basic principles

Documents:
- Better Data Visualizations: A Guide for Scholars, Researchers, and Wonks (Jonathan Schwabish)
- UNECE Making Data Meaningful Part I, Part II
Resources: Data Visualization

Chart help:
- From Data to Viz: leads you to the most appropriate graph for your data. It links to the code to build it and lists common caveats you should avoid.
- Data Viz Catalogue: helpful for selecting graphs, code to build it as well and blog with helpful hints.
- ONS Presenting Data website
- Chart Do’s and Don’ts (Duke University)

Color:
- How to Choose Colors for Your Data Visualizations (Nightingale)
- Choosing colors for your data visualization (Cambridge Intelligence)
- SDG Guidelines (logo, colours, etc.)
- Adobe Color
- Data Color Picker

Icons/SDG data visualization:
- SDG & COVID-19 Data Visualization Toolkit (icons, templates, design considerations) (UNSD)
Resources: Data Visualization

Courses:
- Principles of Data Visualization for Official Statistics and SDG Indicators (SIAP, self-paced course)
- Understanding data and statistics better – for more effective SDG decision making (Module 3: communicating with data) (UNITAR/UNSD/UN ECA)
- Increasing user engagement around data and statistics (UNSD/SIAP)

Qualitative data viz:
- How to Visualize Qualitative Data
- Visualizing Qualitative Evaluation Data presentation

Inspiration:
- Dataviz Inspiration website
- Dear Data Project by Giorgia Lupi
- World Data Visualization Prize 2023 Poster Longlist (World Gov’t Summit)
- Xenographs- weird, but sometimes useful charts
Q: Does any country want to pilot the templates or the icons in some of their materials? If so, what kind of support would you need?
SOME EXAMPLES OF WHAT TO LOOK OUT FOR FROM THE SUSTAINABLE DEVELOPMENT GOALS REPORTS’ INFOGRAPHIC DEVELOPMENT

Identify the problem and indicate your answer
WHAT IS THE PROBLEM?

A. Not focused: too many messages at one time
B. Inappropriate icons
C. Imbalance between visual and written elements
D. Incorrect chart usage
E. Not data-driven
SDG REPORT EXAMPLE: DRAFT VS. FINAL

**DRAFT**

- **1.6 BILLION**
  - INFORMAL ECONOMY WORKERS
  - WHO LACK A SOCIAL SAFETY NET, WERE SIGNIFICANTLY AFFECTED BY THE PANDEMIC

- **88.7%**
  - THE SHARE OF INFORMAL EMPLOYMENT IN TOTAL EMPLOYMENT IN LDCS (2019)

**FINAL**

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  - INFORMAL ECONOMY WORKERS
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**FINAL**
WHAT IS THE PROBLEM?

ECONOMIC RECOVERY IS UNDER WAY

BUT FOR MANY COUNTRIES ECONOMIC GROWTH IS ONLY EXPECTED TO RETURN TO PRE-PANDEMIC LEVELS IN 2022 OR 2023

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Thank you