Building a Data Viz

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Depuis le début de la crise et à cause du conflit au nord, environ 412 401 personnes ont été forcées de fuir le nord du pays. Parmi ces personnes 203 843 sont des déplacés internes et 208 558 sont des réfugiés dans les pays voisins. Environ 5,01 millions de personnes sont affectées par la crise complexe au Mali, y compris 4,6 millions de personnes à risque d'insécurité alimentaire. Les pénuries de nourriture et les mouvements de population internes ont eu des conséquences importantes sur la capacité de résilience des populations.

**Réponse Humanitaire**

<table>
<thead>
<tr>
<th>Nombre de personnes assistées par Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 389</td>
</tr>
<tr>
<td>2 525 628</td>
</tr>
<tr>
<td>105 644</td>
</tr>
<tr>
<td>269 103</td>
</tr>
<tr>
<td>1 144 239</td>
</tr>
<tr>
<td>840 000</td>
</tr>
</tbody>
</table>

**Sécurité Alimentaire**

- **4,6 millions** de personnes restent estimées à risque d’insécurité alimentaire
- **2,97 millions** de personnes affectées par la sécheresse vivant au Sud
- **1,63 millions** de personnes affectées par le conflit vivant au Nord

<table>
<thead>
<tr>
<th>Nombre de personnes à risque d'insécurité alimentaire sévère</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,84 millions</td>
</tr>
<tr>
<td>1,13 millions</td>
</tr>
</tbody>
</table>

**Situation du Choléra**

- 219 Cas de Choléra
- 19 Cas rapportés de décès liés au Choléra

**Crise Nutritonelle**

- 560 000 enfants de moins de 5 ans sont en risque de malnutrition aiguë, dont 175 000 en malnutrition aiguë sévère et 385 000 en malnutrition aiguë modérée.

**Les Violations des Droits de l’Homme au Nord**

Les violations des droits de l’homme dans le nord du pays sont de plus en plus fréquentes en partie du fait des exactions perpétrées par les groupes armés. Les femmes et les enfants sont des cibles particulièrement vulnérables. La vulnérabilité de ces personnes est aggravée par l’accès limité aux Services Sociaux de Base.

**Pourcentage de Déplacés Internes par Région**

Les chiffres indiquent le pourcentage de déplacés internes par région.
Food security and malnutrition remain major concerns in Mali. During the lean season (June - August), i.e. before the next harvests when grain stocks are depleted, it is estimated that nearly one out of every six households will need support for their livelihood. Among them, 410,000 people will require immediate food assistance. Countrywide, one out of every eight children suffers from malnutrition; including 181,000 who are affected by the most severe form and face a nine-fold mortality risk.

**FOOD SECURITY**

2.5 million people affected by moderate and severe food insecurity (as of 31 March 2015)

16% of the total population

# people in need of immediate food aid (phases 3 and 4) - in thousands -

410


MALNUTRITION

181,000 children affected by severe acute malnutrition (SAM) (Estimate based on 2014 SMART surveys)

Regions with > 2% rate of severe acute malnutrition (SAM)

- Bamako District: 3
- Mopti: 2.7
- Timbuktu: 2.4
- Koulikoro: 2.3
- Gao: 2.3
- Segou: 2

PASTORAL SITUATION

Stock breeder communities in the north of the country are struggling due to a deficit of fodder registered along Niger, Burkina Faso and Mauritania cross-border strips as well as high cattle mortality rates. An early pastoralist lean season is expected. In the regions of Gao, Timbuktu and Mopti, unusual cattle movements have been observed as a result from the lack of pastures and the prevailing insecurity resulting in a high concentration of herds.

International Federation of Red Cross and Red Crescent Societies
Fédération internationale des Sociétés de la Croix-Rouge et du Croissant-Rouge
Federación Internacional de Sociedades de la Cruz Roja y de la Media Luna Roja

DATA PLAYBOOK: SLIDEBECK 12
8 Steps for success...

1. Define your audience
2. Set clear goals
3. Define your layout
4. Choose your topic and your story
5. Collect your data
6. Process your data
7. Find the story in the data..
8. Identify Patterns

**COMPARE VALUES**
- Bar chart
- Line chart

**ANALYZE TRENDS**
- Line chart
- Bar chart

**SHOW THE INDIVIDUAL PARTS THAT MAKE UP A WHOLE**
- Pie chart
- Stacked bar
- Stacked column

**UNDERSTAND HOW DATA IS DISTRIBUTED**
- Scatter plot
- Line chart
- Bar chart

**COMPREHEND THE RELATIONSHIP BETWEEN DATA SETS**
- Line chart
- Scatter plot
- Bubble chart
Defining your data...

- **Quantitative**
  - Data that can be counted or measured; all values are numerical.
  - Example: Rainfall in a year.

- **Discrete**
  - Numerical data that has a finite number of possible values.
  - Example: Number of employees in the office.

- **Continuous**
  - Data that is measured and has a value within a range.
  - Example: Rainfall in a year.

- **Categorical**
  - Data that can be sorted according to group or category.
  - Example: Types of products sold.
Data relationships...
Design Principles

Simplification

Hierarchy

Layout

Created by Chameleon Design from Noun Project

Created by Dimitar Petrov from Noun Project

Created by joeartcon from Noun Project

DATA PLAYBOOK: SLIDEDECK 12
Simplification
Simplification

Calories per 100g

- French Fries: 607
- Potato Chips: 542
- Bacon: 533
- Pizza: 296
- Chili Dog: 260
Visual hierarchy

The most important information will be the most visually prominent

1. 2. 3.
Visual hierarchy

Heading 1
Heading 2
Heading 3

Eye flow – "Z" path

+ More important

- Less important

Size
Contrast
Position
Layout

Use portrait for publication

Use landscape for presentation
What is the easiest “document” to read and why?
The baseline grid provides a guide for positioning elements on the page with accuracy, which is difficult to achieve by eye alone.
Alignment

Makes your design visually more appealing and helps to create relationships between elements
Proximity

Related elements should be placed closed
Unrelated elements should not be placed closed
Eyes perceive objects as belonging together when they are enclosed
Eyes perceive objects as belonging together when they are connected

Connection
Separation
Find a good balance, not too cluttered nor too much empty space
Consistency

Establish a style for each element in a design and use it on similar elements.
Exercise

The African Union (AU) is a continental union consisting of all 55 countries on the African continent. It was established on 26 May 2001 in Addis Ababa, Ethiopia, and launched on 9 July 2002 in South Africa,[4] with the aim of replacing the Organisation of African Unity (OAU). The most important decisions of the AU are made by the Assembly of the African Union, a semi-annual meeting of the heads of state and government of its member states. The AU's secretariat, the African Union Commission, is based in Addis Ababa.

All UN member states based in Africa and African waters are members of the AU, as is the disputed Sahrawi Arab Democratic Republic (SADR). Morocco, which claims sovereignty over the SADR's territory, withdrew from the Organisation of African Unity, the AU's predecessor, in 1984 due to the admission of the SADR as a member. However, on 30 January 2017 the AU admitted Morocco as a member state.

Top 10 Populated countries in Africa

1. Nigeria: 182.2M
1. Ethiopia 99.39M
1. D.R. Congo 77.27M
1. Algeria 39.67M
1. Uganda 39.03M

Please find the other missing countries and other data that you might find interesting...
Examples
Best Practices for bar charts

USE HORIZONTAL LABELS
Avoid steep diagonal or vertical type, as it can be difficult to read.

START THE Y-AXIS VALUE AT 0
Starting at a value above zero truncates the bars and doesn't accurately reflect the full value.

USE CONSISTENT COLORS
Use one color for bar charts. You may use an accent color to highlight a significant data point.

ORDER DATA APPROPRIATELY
Order categories alphabetically, sequentially, or by value.
Extorsions de biens 32%

Arrestations arbitraires 15%

Travaux forcés 13%

Taxes illégales 12%

Autres (viols, pillages, enlèvements, homicides) 16%

Coups et blessures 12%
<table>
<thead>
<tr>
<th>Type of Incident</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extorsions de biens</td>
<td>32 %</td>
</tr>
<tr>
<td>Arrestations arbitraires</td>
<td>15</td>
</tr>
<tr>
<td>Travaux forcés</td>
<td>13</td>
</tr>
<tr>
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<td>12</td>
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<tr>
<td>Taxes illégales</td>
<td>12</td>
</tr>
<tr>
<td>Viols</td>
<td>7</td>
</tr>
<tr>
<td>Pillages</td>
<td>6</td>
</tr>
<tr>
<td>Enlèvements</td>
<td>2</td>
</tr>
<tr>
<td>Homicides</td>
<td>1</td>
</tr>
<tr>
<td>Incendies</td>
<td>0</td>
</tr>
</tbody>
</table>
Best Practices for pie charts

**Visualize no more than 5 categories**

It is difficult to differentiate between small values; depicting too many slices decreases the impact of the visualization. If needed, you can group smaller values into an “other” or “miscellaneous” category, but make sure it does not hide interesting or significant information.

**Make sure all data adds up to 100%**

Verify that values total 100% and that pie slices are sized proportionate to their corresponding value.

**Start at 12 o’clock**

Always start at 12 o’clock with the largest segment clockwise.

**Order slices correctly**

There are two ways to order sections, both of which are meant to aid comprehension:

- **Option 1**: Place the largest section at 12 o’clock, going clockwise. Place the second largest section at 12 o’clock, going counterclockwise. The remaining sections can be placed below.
- **Option 2**: Start the largest section at 12 o’clock, going clockwise. Place remaining sections in descending order, going clockwise.
THANK YOU