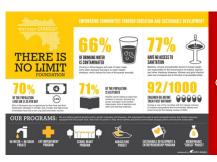
"They say knowledge is power,
but how do we make
knowledge powerful?"

Resources for learning & loving data visualization

Data visualizations are generated by software, driven by numbers, and can be quickly tweaked and altered.





Infographics are manually drawn; to apply the same look and feel, you have to manually change everything, which can take time.

IDENTIFY YOUR
AUDIENCE &
CONTEXT

FIND THE STORY IN YOUR DATA

BUILD YOUR VISUALIZATION

DISSEMINATE, SHARE & USE

Creating a Visual Concept

Once you have data or information you want to share using a visualization, there are key questions to think through as you sketch out your concept.

WHO are the stakeholders?
WHAT type of info do they need?
WHERE are they using these data?
WHY do they care about these data?

When answering these questions, think about these key three inputs into your visualization.

Audience: Who is going to look at this visualization? You can't know what data has meaning unless you know who will be interpreting the information.

Data: What information do you have? What story does it tell—correlations, statistics, etc.?

Designer: Who is designing this concept? This could be you, you and your team, or you with an external designer.

Based on the answers to the questions above, determine what kind of visualization would be best: a graph, infographic, video, or another concept.

Your concept will determine the **resources** needed.

Human resources Depending on the visual you're creating, you may be able to manipulate the data yourself or require graphic support from publications staff. Developing visualizations is simplified through various software programs and tools, making data viz a skill anyone with an interest and the time can learn.

Time Consider how much time needs to be budgeted for your visualization(s). For example, are they complex graphics, or simple graphs that could be displayed as a dashboard?

Tools See the reverse side for great software, tools & ideas!

Suggested Resources for Learning & Loving Data Visualization

Platforms for creating interesting visualizations*:

DataMarket, http://datamarket.com

Access thousands of data sets from all over the world, including UN and World Bank, or upload your own, and then use the built in tools to create data visualizations.

Tableau, www.tableausoftware.com

Upload your own data and create data visualizations with this very robust software.

Google Fusion Tables, www.google.com/fusiontables
Use Google to easily, quickly make fusion tables with your data.

Dedoose, www.dedoose.com

A mixed-methods analysis software with the capacity to generate compelling visualizations.

Gapminder, www.gapminder.org

Provides a fun interactive platform to explore relationships between variables. Datasets are provided; this platform was made famous by Hans Rosling.

*Note that some open source visualization programs make your data public when you upload. Be sure to read the privacy & data sharing disclaimer.

Platforms for creating infographics: Piktochart.com, easel.ly and Infogr.am offer templates and design approaches for infographics, if that's the next step for your viz.

Platforms for creating timelines: Timeline JS

(timeline.verite.co) allows you to create free timelines using Excel or Google Docs. Tiki Toki (tiki-toki.com) also creates timelines, but requires you pay for external embed and public views.

Resources to take your data viz to the next level:

Complex Diagrams, http://complexdiagrams.com/

Shows the properties and best uses of visual encodings, i.e. whether it's best to use shape or color to convey your message.

Color Brewer, http://colorbrewer2.org/

Colorbrewer is an online tool designed to help people select good color schemes for maps and other graphics.

Junk Charts http://junkcharts.typepad.com/

Places to find useful health datasets:

Sometimes you might want to create a visualization using secondary data. The following sites are great resources for health-related datasets:

DHS Program—http://www.dhsprogram.com—Contains all DHS datasets .

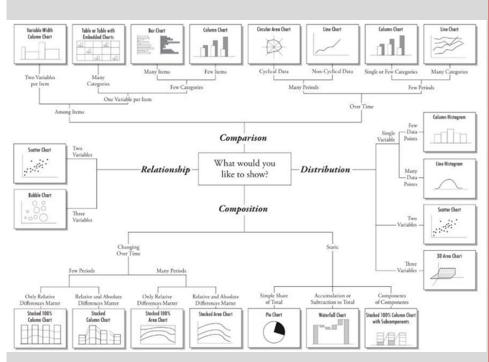
STATcompiler—http://www.statcompiler.com—Simple interface for downloading select DHS data in table s or visualizations. Also has a mobile app available for Apple, Android & Windows devices for on-the-go stats access!

World Bank Data—http://data.worldbank.org—includes most WHO, DHS, and UN statistics.

Institute for Health Metrics and Evaluation (IHME) Global Health Data Exchange—http://

<u>www.healthmetricsandevaluation.org/ghdx</u>—Includes data from all IHME research and others.

AIDSVu.org—Has both state and county level HIV data.



Choose-your-own-adventure of charts

Hacking Beautiful Graphs in Excel

Have no fear: if your tool of choice is the ubiquitous MS Excel, you can still create beautiful visualizations.

Ann Emery (http://annkemery.com/excel) has excellent short video tutorials in her for creating interesting graphs using Excel and some creative maneuvering of data, rows, and columns.

Think about how to make your Excel graph or chart sing: change fonts, color palettes, and use other formatting tricks to trick people into thinking you used a fancy viz tool.

Think about your choice of chart types: avoid creating pie charts, which can be hard for the human eye to see, and consider horizontal bar charts instead of vertical ones, which give you more space for your axis labels and categories.

Check out the flowchart at left for some inspiration to help you go beyond the bar chart!