



If A Picture Is Worth A Thousand Words, Then An Infographic Speaks Volumes: Easy Library Data Visualization

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Abstract

You can spend hours writing an annual report about library needs, but decision-makers may not have time to read it. What if you could transform pages of usage data and statistics into a single infographic to effectively communicate your library's positive impact? Using free online tools, I'll show you how!

What Are Infographics and Data Visualization?

The terms "data visualization" and "infographics" are often used interchangeably, but they are actually two different means of utilizing data in a visual way.

INFOGRAPHIC: Uses visual cues to communicate information

DATA VISUALIZATION: A visual representation of data, or the practice of visualizing data. Common forms include pie charts, bar graphs, and line charts (Lankow, Ritchie & Crooks, 2014)

Criteria to determine whether to call a graphic a data visualization or an infographic (Illinsky & Steele 2011, Yuk & Diamond 2014)

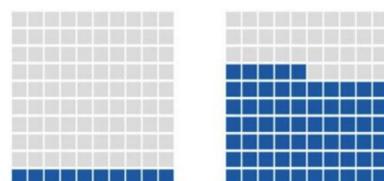
	Data Visualization	Infographic
Method of generation	More numbers used	Original images created
Quantity of data	More data	Less data, more conclusions
Degree of aesthetic treatment	Less artful, more focused on information itself	More artful
Interactive vs. static	Interactive (data changes)	Static (data remains fixed)

Why Should You Use Them?

50-80% of the brain is dedicated to forms of visual processing. (Krum, 2014)

Picture Superiority Effect

Memory retention after 3 days



10%

Text or Audio Only

65%

Text + Picture

(Source: Krum, 2014)

People may prefer to learn through visual, auditory or tactile/kinesthetic means, but how they are actually learning these days is **visually**. (Lankow, Ritchie & Crooks, 2012)

How Do You Create Them?

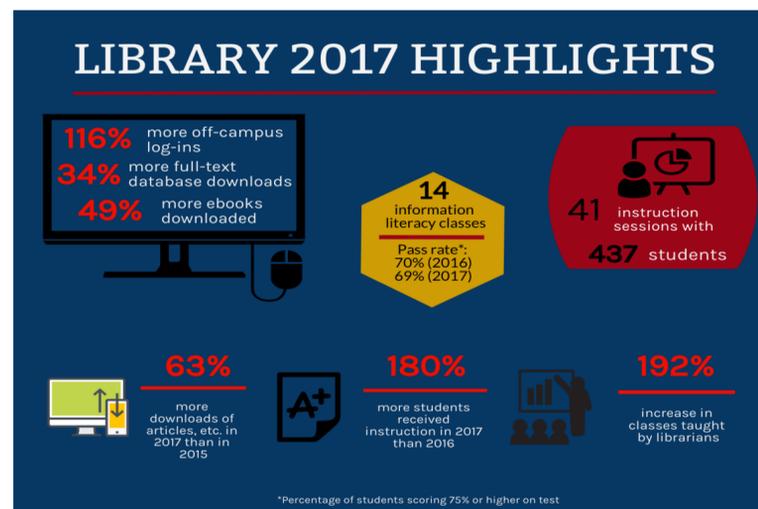
- Think of the message you want to communicate to your audience. Whom do you intend to reach with your message?
- Where is your data coming from? Libraries constantly gather data: user statistics, door counts, items circulated, database usage, etc..

Per Krum, 2014:

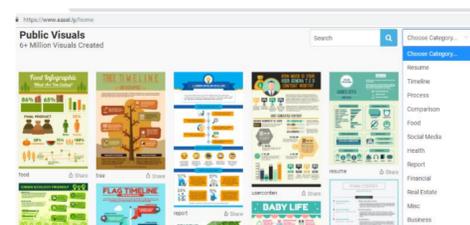
- Your data sources must **tell a story**.
- Data sources must be **reliable**, and as **unbiased** as possible.
- Data must be **relevant**, preferably no more than 1-2 years old.
- Limit your data sources for **consistency**. 2-3 sources is ideal.
- If using multiple data sets or multiple sources, make sure they are **complementary**, not contradictory.

The VIU Library used data sourced from library statistics, as well as data sets downloaded as Excel spreadsheets from our Koha open-source ILS and database vendors, to create an infographic in **Easel.ly**.

Our story for key VIU decisionmakers: despite a decrease in student enrollment, the VIU Library experienced an increase in library usage!



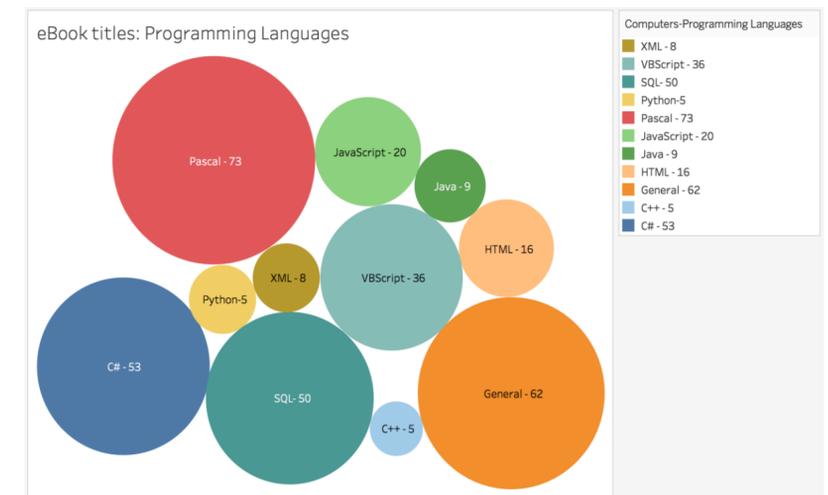
Easel.ly (<https://www.easel.ly/home>) is a free, user-friendly tool for making infographics. It offers intuitive menus and video tutorials. To get started, create a username and password. Use the Search box or drop-down menu to pick a ready-made template.



You can then customize your template. Add shapes, change the background, add icons, etc. For the VIU Library infographic, I found a background that fit the school's dark blue/dark red color scheme. I limited main colors to blue, and red, and used yellow as an accent color.

Easel.ly and Tableau

A free (though for a limited time) tool to use for data visualization is Tableau (<http://www.tableau.com>). The VIU Library used a dataset of ebook subjects (acquired by running a report) to create this bubble chart of computer programming languages book titles.



For alternatives to Tableau, do a search for "tableau alternatives free" or "tableau alternative free open source". Then go play!

Recommendations

- Follow the "5-Second Rule"**. Your design must clearly communicate the key message in less than 5 seconds. (Krum, 2014)
- Tell ONE story really well**, not a bunch of small stories. (Krum, 2014)
- Your data may surprise you!** Prince George's County Memorial Library System in Maryland uses Tableau for data collection. They were surprised to learn the busiest time in branches was not weekends, but Tuesday evenings. They changed staffing to meet this unexpected need. (Icimo.com, n.d.)

References

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