



Cool Infographics: Effective Communication with Data Visualization and Design

by Randy Krum John Wiley & Sons (US). (c) 2014. Copying Prohibited.

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Introduction

Overview

I have always loved data.

The data could be huge spreadsheets of numbers, quantitative research data, business processes, demographics, financial results, map locations, or web statistics. It didn't matter—I loved it all.

After hours of working with a data set in a spreadsheet or database, I could see patterns and make interesting discoveries from the numbers. However, nobody else wanted to review the spreadsheet in that detail. They didn't want to see the data; they just wanted to understand the conclusions. That's when I embraced data visualization and infographics design.

If I could put a large number of data points onto one page, I could make it easier for the audience to understand how they all compared. People could look at one data point and understand how it fit into the context of the whole data set. Much later, I learned about studies and research that support the power of data visualization, but at the time I saw for myself that for most audiences, seeing is believing. If I could visualize the data, audiences could understand the information.

Working in marketing and product development departments for several consumer product companies, I was mining these visualizations as inspiration to create visual designs with my own data. I needed to walk the audience through a sequence of information so that it would understand how I was reaching my conclusions; I needed to tell a story with the data. I also determined that it needed to be visually distinctive for it to be memorable.

Internal graphic design departments never had enough time available to help with presentations. They were busy with product packaging, websites, and advertisement designs. My degree in mechanical engineering—not graphic design—meant I had to learn information design on my own. I came to infographics from the data side and learned design along the way.

Over time, my designs got better and visualizing the data conveyed a strong sense of understanding and credibility. I practiced and learned what resonated with audiences. I might not have started out with the intent to become an infographics designer, but that is where I ended up.

In 2007, I started the Cool Infographics blog (coolinfographics.com) as an experiment. I was already collecting good infographic designs I liked and hanging them on the walls of my office, so those became the first infographics I posted about on the blog. Privately, I didn't think the blog would last more than year because I was afraid I would run out of material. Fortunately, the awareness and popularity of infographics exploded online, and now there are more good infographics than I will ever be able to post.

What's in This Book

This is a book for everyone, but different people use infographics for different purposes. The chapters have been written so they can each be read independently, and even though I think you should read every word, you don't need to read this book cover to cover to understand the content.

Chapter 1: "The Science of Infographics" defines the difference between data visualizations and infographics, the escalating information overload, the research behind the power of infographics, and why visual storytelling with data will continue to grow.

Chapter 2: "Online Infographics" explains why so many infographics online are designed to be tall and explores the many different objectives of infographics online. Infographics are intentionally structured for different purposes like persuasion, education, advertisements, and more. How copyrights and trademarks apply to infographics is also explained.

Chapter 3: "Infographics and SEO" delves into why publishing infographics is so valuable to online marketing campaigns, and how you can get the most value from launching infographics online. Relevance and online lifespan are key components to successfully launching an infographic. A complete strategy for releasing infographics online is described in detail.

Chapter 4: "Infographic Resumes" takes a close look at the growing phenomenon of visualizing data in personal resumes. These resumes have benefits and risks that every job seeker should understand. Also, various publishing strategies for successful infographic resumes are explained, and a number of design tools are introduced.

Chapter 5: "Internal Confidential Infographics" explores how people are using data visualizations and infographics inside companies to improve communication of the company's confidential data. These private designs are powerful communication tools shared internally for meetings and presentations, but never released publicly.

Chapter 6: "Designing Infographics" is a chapter for anyone that wants to jump in and start creating great data visualizations and infographics. It doesn't matter whether you are going to try designing your own infographics or work with an infographic designer. These design tips and strategies will help you design cool infographics.

Chapter 7: "Design Resources" presents some of the most popular options for software applications and online design tools to create data visualizations and infographics.

The edge of the book is color-coded as a simple visual way to find the chapter you want.

Jump in anywhere and enjoy!

What Makes an Infographic Cool?

I've been asked by a lot of different people, "What makes an infographic cool?" Over the years, I've selected hundreds of designs to post on the Cool Infographics site, out of the thousands of infographics published online. Is there some magic formula for what makes an infographic cool? How does one infographic design get chosen as "cool" when others don't?

Like anything judged to be "cool," the criteria are a moving target and the topic of much debate. Opinions about what makes an infographic cool are quite varied. In 2013, I invited a number of experts in data visualization and infographics design to weigh in on this question with guest posts on CoolInfographics.com. Here's what a few of them said:

What makes infographics cool is that they can be extremely effective at explaining every conceivable topic in any industry for any reason.

—Karl Gude, spearheads the first information graphics program at Michigan State University's School of Journalism and is the former Director of Information Graphics at Newsweek magazine and The Associated Press

"Cool" infographics effectively build links, drive social shares, and create buzz in a unique way.

-Matt Siltala, President of Avalaunch Media

To create a powerful infographic, save the big graphics and clever images. Dig into the information and find the story that means something to us all.

—Dean Meyers, Visual Problem-Solver

An infographic is "cool" when it presents an important and complex story and does so with integrity and good looks.

—Nathaniel Pearlman, Founder of Graphicacy and Timeplots

You can find the complete guest posts and much more at:

coolinfographics.com/blog/tag/cool

My own short answer is, "I know it when I see it."

My long answer is that a cool design will be a combination of the following aspects:

- Engaging topic
- New, surprising information
- Visually appealing and distinctive
- Simple, focused message
- Quick and easy to read
- Easy to share
- Clear, easy to understand data visualizations
- Credible data sources

This book shares more than 100 examples of cool infographics from designers all over the world that got many of these aspects right. These designs were chosen to be representative of the thousands of cool infographics available online.

Viewing the Infographics

Most of the infographic designs I've included in the book are actually better when viewed online. Many of them had to be reduced in size to fit on these pages, because it's important for you to see the scale of the entire infographic designs instead of just pieces. I have created a closeup portion of many of the designs to demonstrate a particular point or to make some of the text readable.

For all the example designs that are available online, I have included a link to the original source so that you can see the full-size original version online, the way the designer intended. However, many of the URLs are long and difficult to type into your browser.

The other challenge I faced is that over time links break. Sites go down or move to new domain names, but when the URLs are printed in the book, they are permanent. I wanted to ensure that many years from now you could still view the full-size versions online. So I have created a shortcut URL for each of the online examples that I control. If any of the websites move the infographics to a new link address, I will change the destination of this shortcut URL to redirect to the new address.

For each of the figures available online, there are four ways you can get to the original infographics:

- The complete original URLs for online infographics are listed at the end of each chapter.
- I have created a simple shortcut URL for each online infographic using the coolinfographics.com domain that will take you to the original page online.

- All the links are listed by chapter on a page at www.wiley.com/go/coolinfographics. From that page, you can simply click the links instead of typing them in.
- All the clickable links are also listed by chapter on a page at coolinfographics.com/figures.

Join the Conversation

The ideas and strategies behind data visualizations and infographics are continuing to evolve and change every day. Cool infographics from three years ago might not be considered "cool" today. As new tools and technologies become available to designers, you can expect to see new innovations in infographics design and distribution.

I encourage you to follow along and add your voice.

Cool Infographics blog: CoolInfographics.com

Twitter: @rtkrum (twitter.com/rtkrum)

Facebook: facebook.com/rtkrum

Google+: gplus.to/rtkrum

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