

What Are Infographics and Why Are They Important?

By Daniel Adams

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Infographics are visual presentations of information that use the elements of design to display content. Infographics express complex messages to viewers in a way that enhances their comprehension. Images are often an extension of the content of a written article, but infographics convey a self-contained message or principle.

If a road sign has too much information on it, then it is difficult to read. Infographics compress and display this information in a visually pleasing way so that drivers don't miss the message.

Infographics communicate complex data quickly and clearly, and they are considered to be effective worldwide.

What Are Infographics?

When a complex piece of information needs to be described quickly, precisely and clearly, a graphic is suitable. Infographics are used for signs, maps and data presentations. Scientists, technical writers, mathematicians, educators and statisticians ease the process of developing, organizing, recording and communicating conceptual information by using infographics.

Infographics are used for the following reasons:

- To communicate a message,
- To present a lot of data or information in a way that is compact and easy to comprehend,
- To analyze data in order to discover cause-and-effect relationships,
- To periodically monitor the route of certain parameters.

Infographics are composed of three important elements:

Visual Elements

- Color coding
- Graphics
- Reference icons

Content Elements

- Time frames
- Statistics
- References

Knowledge Elements

- Facts
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The History of Infographics

Infographics have been used throughout history. The first known examples of infographics are hieroglyphics or cave paintings in ancient Egypt 5,000 years ago. Nicole d'Orseme (1352-82), Bishop of Lisieux, combined figures into groups and graphed them. Leonardo da Vinci combined graphics with text in his "Treatise on Painting."

The Commercial and Political Atlas, published in 1786 by William Playfair, was the first example of modern infographics. Otto Neurath was then famously known to have attempted to create a language without words, an endeavor that developed into the Isotype movement (International System of Typographic Picture Education). Early adapters of infographics in the US include Fortune magazine, the Chicago Tribune and the New York Times.

The advent of the computer massively affected the kinds of infographics that these publications used. Newspapers cut short the requirement for skilled painters and started using programs like MacDraw by Apple.

Gallop Organization was the first to deeply investigate the capabilities of infographics. Its research concluded that graphic elements receive a greater deal of attention and have a more memorable impression on viewers than a presentation using words only.

The emergence of the Internet precipitated the use of infographics.

Types of Infographics

Infographics are used in many fields: government, the corporate sector, medicine, engineering, research and development and so on. Certain types of infographics are targeted to people with specialized knowledge or expertise. It is possible to classify infographics according to five categories.

1. Cause and Effect Infographics

These graphs explain causal relationships between various physical or conceptual stages; for example, the causes of the recession in the US and its effect on the global economy.

2. Chronological Infographics

Chronological infographics explain an event or process as it happened in time. Presenting information on a timeline enables readers to analyze the temporal relationship between various stages of a process. For example, a bar chart that shows the growth in sales of a particular product over a period of time is a chronological infographic.

3. Quantitative Infographics

Quantitative infographics convey statistical data to readers quickly and clearly. These graphics include charts, bar graphs, tables and lists. Statistical tools such as pie charts also help summarize complex data. Quantitative infographics can be regarded as flow charts of an organizational structure that explain the hierarchy and responsibilities of different positions.

4. Directional Infographics

Infographics can navigate readers through information. Numbers, symbols, icons, diagrams, graphs, tables, arrows and bullets are used to communicate information. We all saw these infographics in our school days. Traffic symbols, scale maps and navigational aids on streets and highways are common examples. Numbers are used to

indicate the distance, and dots, arrows and bullets are used as landmarks for directional aid.

5. Product Infographics

Product infographics can be seen on notice boards at factories and corporate offices, conveying information to all employees and visitors. Product infographics are also used by dieticians and in cooking schools to convey key procedures. Combining images with data makes it easier to comprehend large amounts of information in a limited space. Understanding how to work your new food processor is simple if you look at the images on the back of the box. Imagine how difficult it would be without the images!

Readers who lead busy fast-paced lifestyles do not have a lot of time to interpret data, and so innovative ways of conveying information need to be explored. Infographics communicate key information quickly. They attract the attention and maintain the focus of readers.

Infographics can also be categorized according to how they present graphic information to readers. Visual infographics can be classified in three categories:

- Static infographics present information at once and in its entirety. These graphics have a quick and immediate impact on the reader. Examples of this include newspaper graphics and product manuals.
 - Motion infographics play a major role in cinema and presentations. Information is presented sequentially and consistently. Examples of this include graphic animations and PowerPoint presentations.
 - Interactive infographics engage the audience. Information is presented according to the reader's choice. For example, on the web, a reader might select what they want to view from a complex set of instructive and simulated information.
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Tips for Designing Infographics

Infographics need to convey information clearly, but they can still be creative. Likewise, infographics that capture the imagination of readers can also be comprehensible.

Infographics surround us: we see them on TV, in books, in newspapers, on road signs and in manuals. The Internet is flooded with infographics related to a range of fields—from science and technology to society and culture. How do we ensure that infographics effectively deliver comprehensive information and knowledge to the public?

Simplicity Is the Best Policy

Infographics should be simple, clean, concise and clear. Make sure the information being conveyed is well organized. Visual simplicity ensures that the graphic will be easy for readers to comprehend.

Nothing Takes Effect Without a Cause

Emphasize cause and effect relationships in your presentation. Several infographics depicting the causes of the recent recession in the US are still fresh in my mind for their effectiveness and precision. Even a layperson in Asia would understand the role of the subprime lending industry in the chain of events. Infographics spread awareness of these factors and enable people to voice their concerns.

Draw Your Boundaries

Be clear: limit the scope of your information, and draw your lines accordingly. The attention span of the average user is not increasing. Define your question carefully, and be sure to answer it using the best method available. The visualization you create will be much more effective and imaginative that way.

Sticking to one question makes it easier to communicate to the public. If I wanted to discuss the recent recession, I could begin by asking, "What were its root causes?"

Think in Color

Color is the most effective tool by which authors guide and influence their readers. Color can give readers varied impressions, both conceptual and emotional. It plays an important role in infographics.

Choosing colors that enhance your information is an important aspect of graphic design. Color makes the information you provide more legible and determines the visual hierarchy of information. Choosing the right colors is important. Contrast is king: the background should blend well with the illustrations.

Layout Is Not Just About Typography

Infographics don't have to look like a piece from a newspaper or magazine. Tap your creativity: try different combinations of typography, illustrations, images, charts, diagrams and icons. Adopt an exciting trend in the creation of your design. Use a maximum of two or three fonts in the designs you create. The effectiveness of the infographic will depend entirely on your creativity as a designer. Add a logo if the infographic is connected to a company or institution.

Make It Appeal the Eye

Ensure that you have a clear idea of the final size of the graphic as you are working. Articles online that require you to click on a text link to view the relevant graphics are annoying. Design your graphics to be viewed along with articles. Perhaps viewers will need to click the image to see a high-resolution version, but they should be able to first view the image along with the article to better understand its relevance.

Be Verifiable

Many infographics lead readers to the wrong conclusion due to a lack of verifiable information and detailed data resources. Make infographics trustworthy by allowing readers to dig deeper into the data if they so desire. Always cite your data sources with relevant links. Some articles allow readers to access source data through links to a spreadsheet that they can view on their own.