

Visual Aids in Business Documents



Visual aids are important in business reports. They make reports more exciting and interesting to read. Visual aids can improve the professional quality and readability of business documents. The book *Successful Writing at Work* lists these reasons for using graphics.

1. **Visuals arouse reader immediate interest.** Because many readers are visually oriented, visuals unlock doors of meaning. Readers who place great emphasis on visual thinking will pay special attention to the visuals. Visuals catch the reader's eye quickly by setting important information apart and by giving them relief from looking at sentences and paragraphs. Because of their size, shape, color and arrangement, visuals are dramatic and maintain reader interest.
2. **Visuals increase reader understanding by simplifying concepts.** A visual *shows* ideas whereas a verbal description only *tells* them. Visuals are especially important and helpful if you have to explain a technical process to a nonspecialist audience. Moreover, visuals can simplify densely packed statistical data, making a complex set of numbers easier to comprehend. Visuals help readers see percentages, trends, comparisons and contrasts.
3. **Visuals are especially important for non-native English speaking and multicultural audiences.** Visuals speak a universal language and so can readily be understood. Because visuals pose fewer problems in interpretation, they can help reduce ambiguities and misunderstanding.
4. **Visuals emphasize key relationships.** Through their arrangement and form, visuals quickly show contrasts, similarities, growth rates, downward and upward movements and fluctuations in time, money and space. Pie and bar charts, for example, show relationships of parts to the whole, and an organizational chart can graphically display the hierarchy and departments of a company or agency.
5. **Visuals condense and summarize a large quantity of information into a relatively small space.** The saying, "A picture says a thousand words," is true. Enormous amounts of statistical or financial data, over many weeks, months, and even years, can be incorporated concisely into one compact visual. A visual also results in streamlined messages by saving words. It can record data in far less space than it would take to describe these facts in words alone.
6. **Visuals are highly persuasive.** Placed in appropriate sections of a document, visuals can capture the essence of ideas to convince a reader to buy our products or services or to accept our points of view. A visual can graphically display, explain, and reinforce the benefits and opportunities of plan we are advocating. Readers are far more likely to recall the visual than they might be a verbal description or summary of it.

Characteristics of Effective Visuals

Visual aids are useful when selected and presented correctly. Here are suggestions for choosing effective visuals.

- **Using visuals only when they are relevant for our purpose and audience.** A visual should contribute to the text, not be redundant. A visual must not simply be a decoration. A short report on secretarial procedures, for example, doesn't need a picture of a secretary.
- **Considering how a specific visual will help readers.** What the reader needs to know visually, what type of visual will best meet the readers' needs, and how the visual can be created (scanned, imported, drawn) help us determine what will be included in visuals.
- **Using visuals in conjunction with, and not as a substitute for, written work.** Visuals add to – and not take the place of – clearly written words. A visual may need an explanation.
- **Helping the reader connect the visuals to the text.** By indicating within the text exactly when the reader should look at the visual (usually by the statement “See Fig. 1”, for example), the visual has a greater impact on the reader. Readers should be told where visuals can be found (“below,” “on the following page,” “to the right,” “at the bottom of page 3.”)
- **Inserting Visuals Appropriately.** Visuals are best when placed as close as possible to the first mention of them in the text and are most effective at either the top or bottom of a page. If the visual is small enough, it should be inserted directly in the text rather than on a separate page.
- **Identifying and citing the sources of visuals.** Professional visual aids have identifying elements within a caption (title) that indicated the subject or that explains what the visual illustrates. (e.g. Exhibit 1: Hotel Occupancy January – March 2000). A different typeface and size in the title makes the visuals stand out. Credit to sources of visuals is credited in a simple statement or in in-text citations.
- **Using high quality visuals.** Visuals should be clear, easy to read, and relevant. Visuals that are of poor quality (too small, done in pencil, crooked lines) can actually create a poor impression of the report and upon us as professionals.

Visuals should not be distorted for emphasis or decoration. They should avoid discrimination and stereotypes (such as using pictures of a workforce that excludes female employees)

Kinds of Visual Aids

The two types of visuals are tables and figures (which is any visual not a table).

Tables

Tables are parallel columns or rows of information that present data in categories to show changes in time, distance, cost, employment or some other distinguishable or quantifiable variable. Tables are used so that readers can identify the numbers exactly. Common and understandable units are used and rounded numbers as well. For example, 12.37% can be rounded to 12%. Column and row totals or averages are very useful. Tables are best used to convey precise statistics and information. Fig. 1 (**next page**) shows a table listing quarterly sales data.

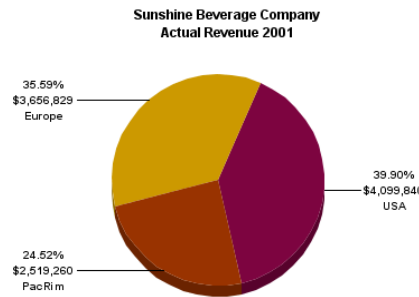
Fig. 1: Table Quarterly Sales (Thousands of Dollars)

	January-March	April-June	July-September	October-December
Guess Inc.	150	200	175	300
Liberty House	350	400	385	450
Sears	400	350	300	425
JC Penny	250	250	325	350
Total	1150	1200	1185	1525

Pie Charts

Pie charts are used for audience to measure area. Values of pie charts can be used for bar charts. However, pie charts are used to compare one part to another part to the whole. Data can be expressed in percentages. Pie charts are circles and need to be labeled outside of the circle. Pie charts should not be used if there are only three wedges (a bar chart is a better choice.) Individual wedges must total 100 percent. The largest slice is at the 12 o'clock position, with proportionally smaller slices placed clockwise. Each slice of the pie is labeled horizontally, within the slice if it's large enough. Shading, coloring and cross-hatching the slices further separate and distinguish the parts. The original pie chart in Fig. 2 (illustrating percent distribution of major credit card accounts) is colored in hues of blues and reds. Fig. 2 shows the Sunshine Beverage Company's actual revenue from its various international corporate offices in 2001.

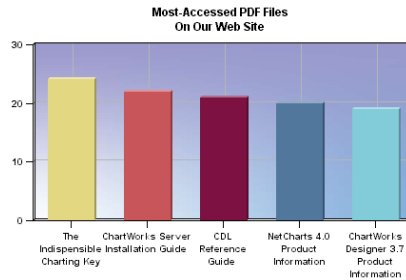
Fig. 2: Pie Chart (source: <http://www.visualmining.com>)



Bar Charts

Because charts are less complex, they work best with a consumer audience. Unlike graphs, which are plotted according to specific mathematical coordinates, charts do not display exact and complex mathematical data. Bar charts are easy to understand and useful. They are used to compare one item to another, to items over time, and to show correlations. Horizontal lines are used for long labels and vertical or horizontal bars are used for short labels. Horizontal and vertical axes are labeled. There are many different types of bar charts: pictogram/histogram grouped bar charts, segmented bars, or deviation bar charts. The bar chart in Fig. 3 (next page) is a segmented bar chart showing the percentage of adults who attend movies at least once per month.

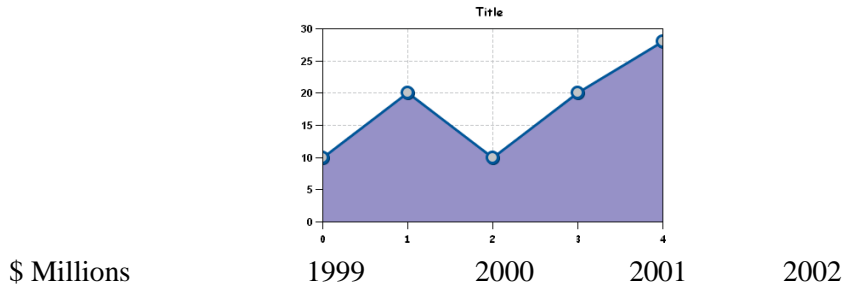
Fig. 3: Bar Chart (Segmented) (Source: <http://www.visualmining.com>)



Line Graphs

Line graphs are easy to interpret. Line graphs take statistical data presented in tables and put them into rising and falling lines, steep or gentle curves. They are used to compare items over time, to show frequency or distribution, and to show correlations. Line graphs visually portray data that changes, such as cycles, fluctuations, trends, distributions, increases and decreases in profits, employment, energy levels and temperatures. A simple graph has a horizontal and a vertical axis that intersect to form a right angle. All axes are labeled. When time is used a variable, it is usually put on the horizontal axis. A simple line graph is presented in Fig. 4.

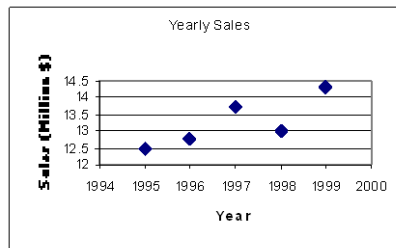
Fig. 4: Line Graph (Source: <http://www.visualmining.com>)



Dot Charts

Dot charts are used to show correlations and other large data sets. Horizontal and vertical axes are labeled and dots are usually small. Fig. 5 shows a simple dot chart.

Fig. 5: Dot Chart

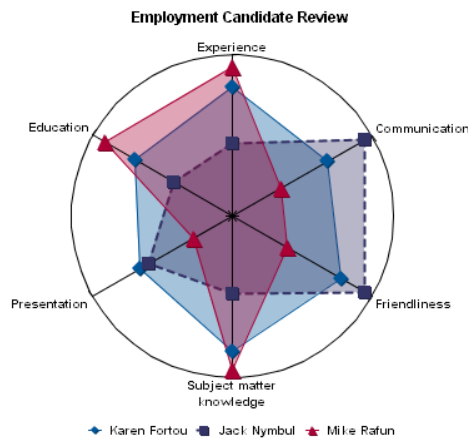


Radar Graphs

Also called spider or star graphs, these complex-looking visual aids compare data between sets. They are interpreted by reading each individual value or by reading the items on each axis. For example, in Fig. 6 below, let's say you wanted to compare Mike Rafun (the red triangle) to Jack Nymbul (navy blue square) or Karen Fortou (bright blue diamond). You may compare them by (clockwise, starting at top) experience, communication, friendliness, subject matter knowledge, presentation, and education. Focusing on experience, then, it seems Mike has slightly more than Karen and a lot more than Jack. But in terms of friendliness, Mike fares poorly, behind both Karen and way behind Jack. As you can see, the more items being compared, the more complicated the graph is to read.

Fig. 6 Radar Graph

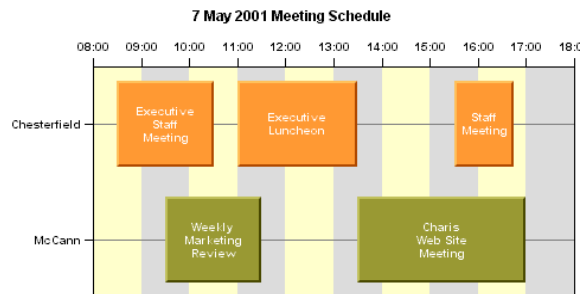
(source: <http://www.visualmining.com/examples/styles/radar.html>)



Gantt Charts

Gantt charts, or time charts, show separate events that have a set starting and ending point. These kinds of charts are excellent for planning the use of resources, such as time. Gantt charts can show multiple sets of data. Each data set can represent one or more tasks. The data sets can be delineated by the use of separate colors. The data can be laid out as a horizontal set of boxes that describes the range for the data in terms of starting to ending values. Fig. 7 demonstrates meeting schedules for two executives named Chesterfield and McCann for May 7, 2001 beginning at 8:00 a.m. and ending at 6:00 p.m.

Fig. 7: Gantt Chart (Source: <http://www.visualmining.com>)



Photographs

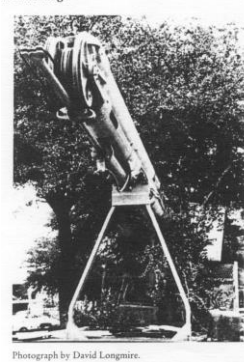
Good photographs are cropped for best results to eliminate distracting backgrounds and have no markings. Their chief advantage is realism and clarity. Photographs of something shown “before and after” are especially effective. As easy and convenient photographs are to use, they must be presented with care. The following photographs from Successful Writing at Work show effective and ineffective photographs.

Fig. 8.1 shows a clear and useful picture of a hydraulic truck (often called a “cherry picker”) used to cut high branches. The truck is placed in the foreground but the photo has enough background information to indicate the truck’s function. Fig. 8.2 shows another photograph of the same truck. This photograph is poor. It’s taken from the wrong angle so that everything becomes emerged and confusing. There is no sense of the parts of the truck, their size or their function.

Fig. 8.1: Effective Photograph



Fig. 8.2 Ineffective Photograph



The photos in Fig. 9 use color for side by side comparison.

Fig. 9: Photo (Source: J. Honda) Home in Mililani Mauka



Before



After

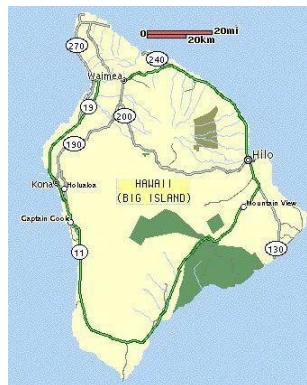
Maps

Maps are used for locations or to compare items in different locations. A large-scale map displays a lot of social, economic, or physical data (such as population density, location of retail

businesses, hills, freeways, or rivers) for a small area. States, provinces, or countries are labeled. Job requirements will dictate how detailed maps should be. Architectural maps are extremely detailed, showing the location of pipes, telephone cables, and easement lines. Site plans for a company's new location are less detailed maps. Fig. 10 is a simple map showing navigable roads on Hawai'i island.

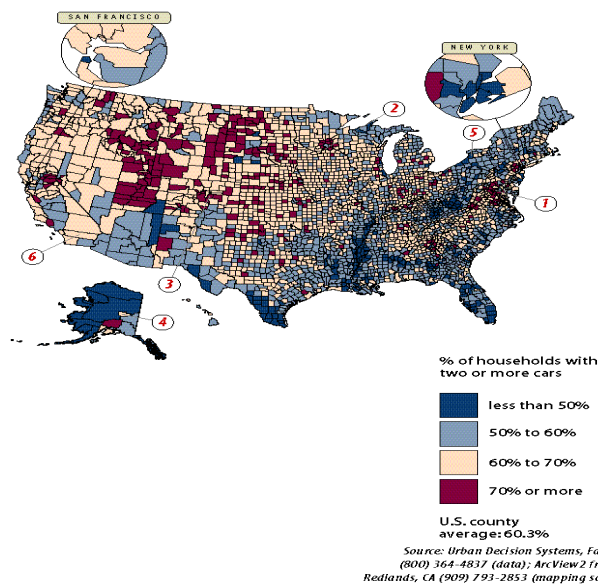
Fig. 10: Map Navigable Roads on the Island of Hawai'i

(Source: <http://www.hana-maui.com/maps/hawaii.html>)



If necessary, a legend, or map key, provides an explanation of dotted lines, colors, shading or symbols. Note how the legend helps the reader make sense of the map in Fig. 11. The map below is in hues of blues and reds.

Fig. 11: Map

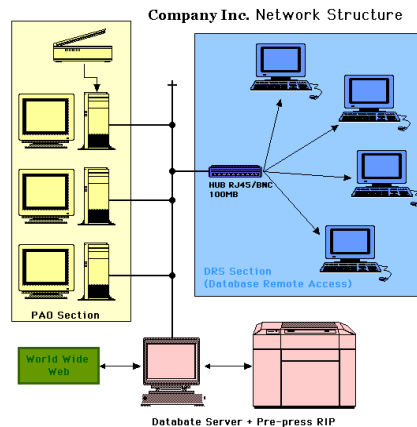


Flow Charts

Flow charts show movement. They display the stages in which something is manufactured, accomplished, developed, or operated. Flow charts can also be used to plan the

day's or week's activities. A flow chart tells a story with arrows, boxes, and sometimes pictures. Boxes are connected by arrows to visualize the stages of a process. Three or four stages minimum should be shown. Flow charts often proceed from left to right or from top to bottom. Computer programming instructions tend to be written this way. Fig. 12 is a simple flow chart.

Fig.12: Flow Chart (Source: <http://www.flowchart.com>)



Organizational Charts

Organizational charts do not display statistical data, nor do they record movements in space or time. Rather, they picture the chain of command in a company or agency, with the lines of authority stretching down from the chief executive, manager or administrator to assistant manager, department heads or supervisors to the employees. Organizational charts illustrate the makeup of a company and the various offices and departments through which orders and information flow in the company or agency. Organizational charts are also useful for coordinating employee efforts in routing information to appropriate departments. The chart in Fig. 13 shows a company's management team.

Figure 13: Organizational Chart

(Source: <http://www.smartdraw.com/resources/examples/business/orgchart1.htm>)



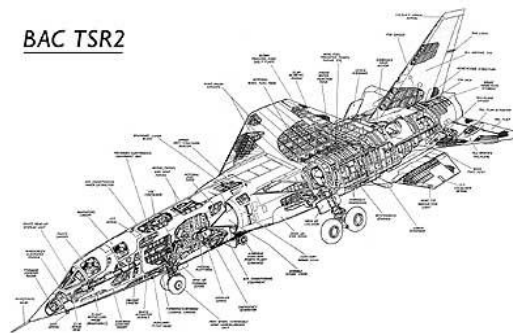
Drawings

Drawings can show where an object is located, how a tool or machine is put together, or what signals are given or steps taken in a particular situation. By studying the drawing and following the discussion, readers will be better able to operate, adjust, repair, or order parts for equipment. Drawings are especially helpful when giving instructions.

Drawings have two advantages over photographs: (1) as little or as much detail as necessary may be included in a drawing and (2) a drawing can show interior as well as exterior views, which may be important when the reader must understand what is going on under the case, housing or hood. Fig. 14 is a cutaway drawing showing internal parts normally concealed from view.

Fig. 14 Cutaway Drawing

(Source: <http://www.aemann.pwp.blueyonder.co.uk/aircraft/virtraf/tsr2cutaway.html>)



Computer Graphics

With computer graphics software, writers can locate, create, edit and position in documents visually all of the kinds of visuals discussed above. A presentation graphics package guides you through the process of inputting data and selecting the way to display them. Raw data is plugged into the computer software (or data already stored in the database or from a spreadsheet program.) The computer then plots the data into the correct chart, graph or table. Most software even suggests the more relevant visual representation to display data.

Many images are available for computer use. Many graphics packages come with comprehensive clip art libraries. Other graphics programs allow you to draw or import an image, add detail, resize, rotate, and combine with other graphics. These images can be copied and pasted onto word processing documents. Most of the images in this handout were scanned, copied and pasted onto these pages.

source: taken in places verbatim from *Successful Writing at Work (2000)*