

XXX 487

Senior Design Phase I

Making Persuasive Presentations

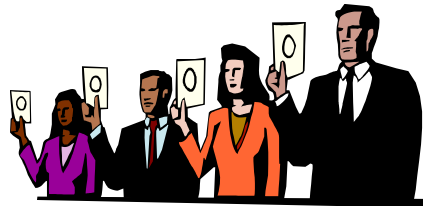
Adapted from a presentation by
Dr. George Hayhoe
Spring 2014

Spring 2016

1

What we will discuss today

- Understanding the communication process
- Preparing your presentation
- Designing the visuals



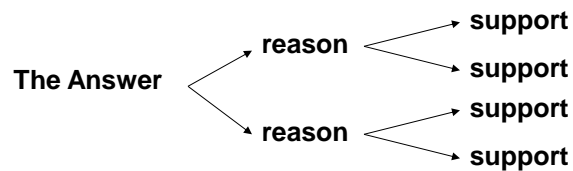
As the sender, you must establish credibility

- Display knowledge of subject
- Display knowledge of audience
- Display professional manner



Consider the message itself

- Organization of content
 - Beginning
 - Middle
 - End
 - Transitions
- Validity of argument – use a logic tree



Messages are conveyed through several channels

- Spoken
- Visual
- Written
- Body language



Messages are delivered to an audience

- Know their agenda
- Know their preferences
- Know their feelings towards you



Observe audience feedback

- Verbal and nonverbal reactions
- Clues to whether or not they understand you



Each visual should add value

- Make the message the heading
- When possible, use a graphic to illustrate the message rather than using a bulleted list

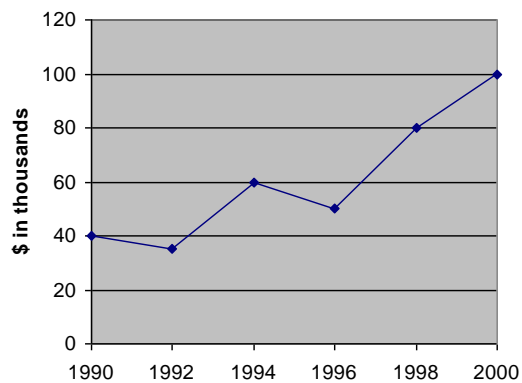


Make the message the heading

- People read top down
- Heading should convey significance of visual
 - What it means, NOT what it is
- If you can't state a message, the visual isn't needed



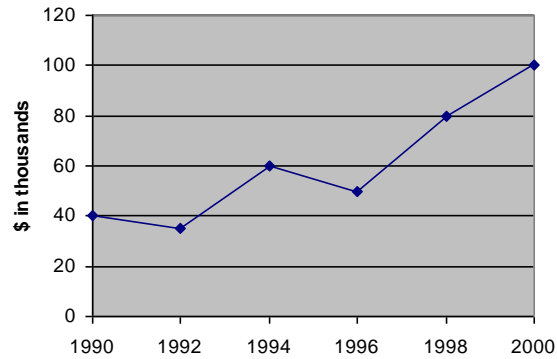
Sales 1990-2000



A topical heading says "what it is."



Sales have nearly tripled in 10 years



A message heading says “what it means.”



Agenda

- Overview
- Current market
- Competitors
- Opportunity
- Next steps

This visual tells audience only that the presentation has 5 parts.
It provides no meaningful roadmap.



Our goals today are

- Define critical issues
 - New technology
 - New market demands
- Determine change in focus
- Agree on implementation steps

This visual sets stage for presentation by letting audience know what the speaker hopes to achieve as well as the order of topics.



Xenon headlights illuminate signs better than halogen headlights do

Halogen Headlight



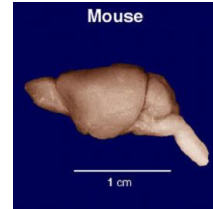
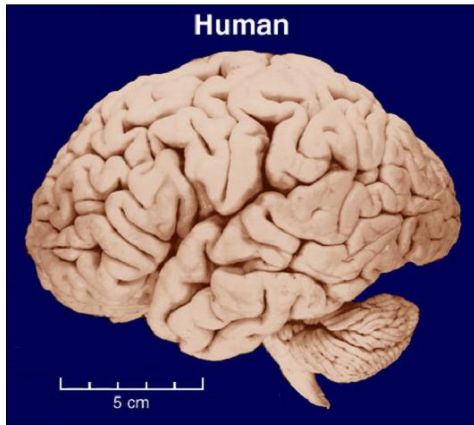
Xenon Headlight



[Sylvania, 2008]



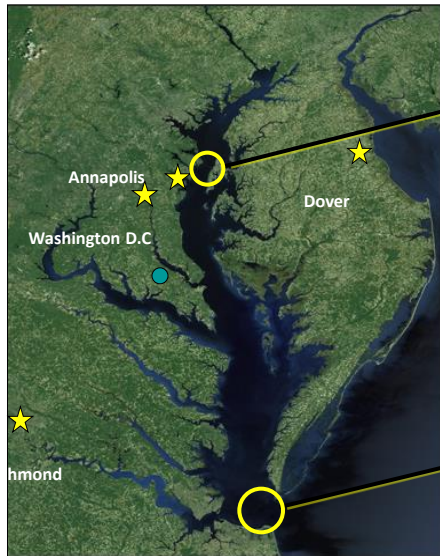
The small size of the mouse brain makes locating specific areas extremely difficult



[Welker, 2008]



The Chesapeake Bay, which is the country's largest estuary, has only two places for traffic to cross



In the past 55 years, traffic has significantly increased on the Chesapeake Bay Bridge

1952
Traffic: 1.1 million

1961
Traffic: 1.5 million

2007
Traffic: **27 Million**



[Maryland Transportation Authority, 2007]



What to know about designing text visuals

- Make the message the heading
- Follow simple guidelines



Here are some guidelines for text visuals

- Use strong action verb phrases
- Keep lists parallel and in the order you intend to follow
- Use upper/lowercase type and simple typeface
- Highlight the most important message on the visual



Organizational structure has allowed these weakness to develop

- Key tasks are not being performed: market research, long-range planning, proposal writing.
- The organization is overly dependent on key people: two individuals manage all aspect of program.
- Work unevenly divided: several departments are overloaded, other are underutilized.
- Communication among departments is poor.
- The staff' s involvement in the organization is artificially limited.

Text is too dense, too long, and visually unappealing.



We can gain a competitive advantage if we

- Provide major pricing advantage with new plants
- Reach the market ahead of the competition
- Service the entire region from central distribution

Phrases let speaker tell story. Verbs give sense of action.



We will build on the basics

- *Provide* superior financial products
- *Unequaled* client service
- *Strength* and value

A list that is not parallel in form is hard to read and understand.



To build on the basics, we will

- *Provide* superior financial products
- *Offer* unequaled service to clients
- *Preserve* strength and value

Strong verbs make good lists.



Guidelines for any graphic

- Message determines form
- Convey one message per chart
- Make the chart easy to read
- Convey data honestly
- Eliminate all unnecessary design details

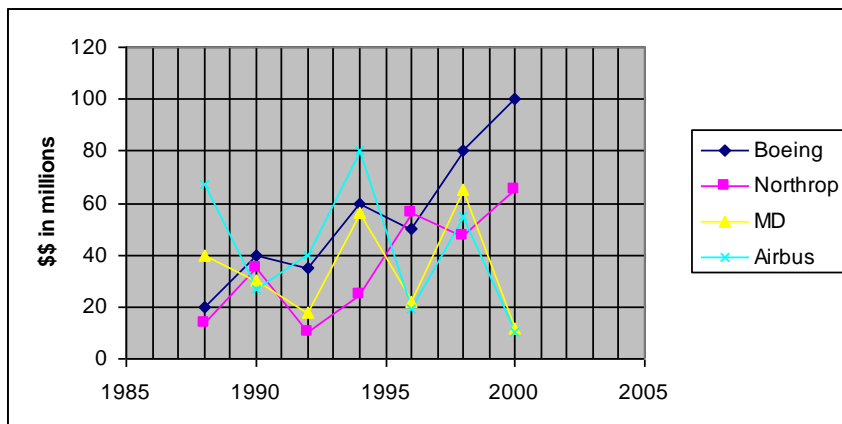


Message determines form

- Bar and column chart – compares or groups items
- Column and line chart – shows change in variables over time
- Pie chart – indicates relation of part to other parts or to the whole
- Scatter diagram – shows the relation of two or more variables



Gross Revenues per Product



Important information not highlighted; too many visual distractions.

ENGINEERING

As a % of sales, manufacturing and G&A costs have remained steady

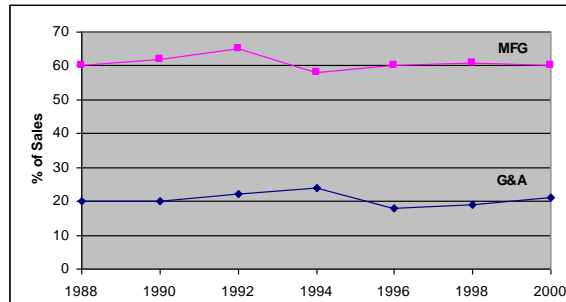


Chart clearly illustrates message in heading. Labels are clear.

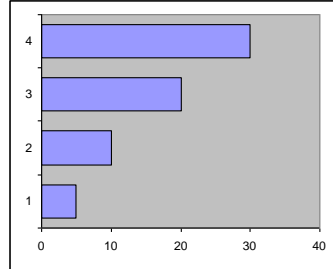
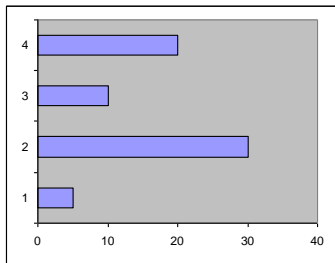


Tips to convey data

- Order variables for easy comparison
- Keep differences between quantities equal
- Start numerical axis at zero
- Use 3D charts sparingly—they give deceptive weight to the items in the “front”



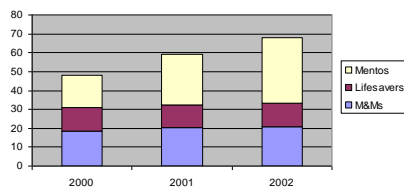
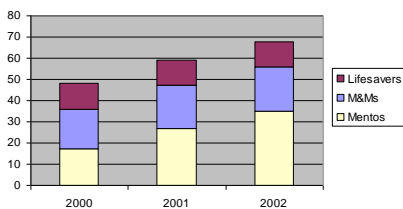
Conveying data



Ordering variables by size makes comparison easier.



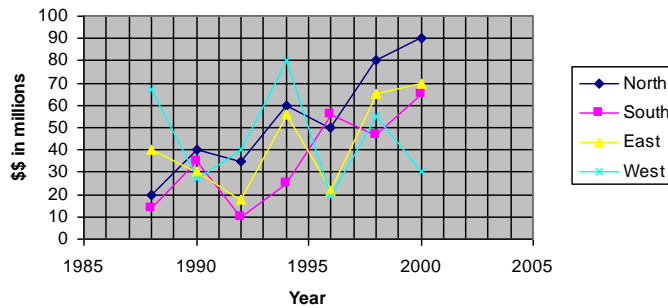
Put the least varying bar of stacked bars on the bottom



This chart is a more honest representation of the data.



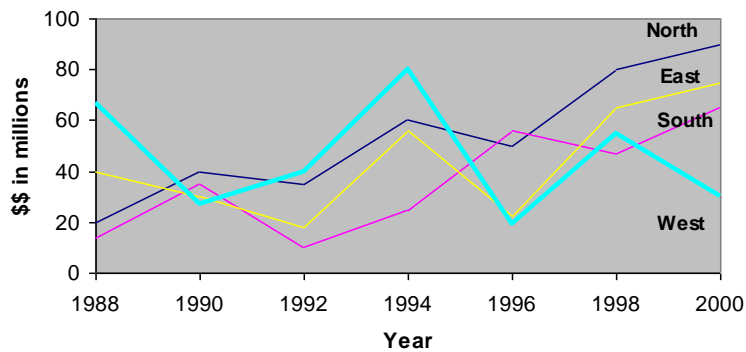
Sales by Division



Start numerical axis at zero and eliminate unnecessary grid lines.



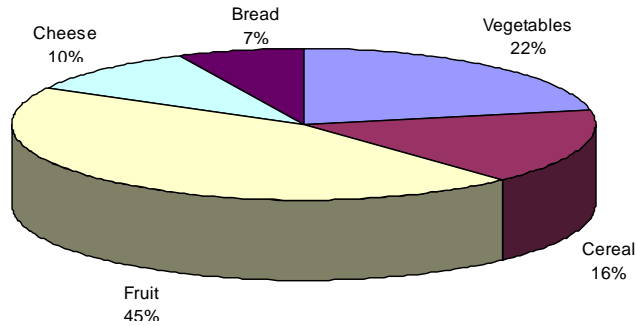
Sales have increased in all divisions except the West



Message is in heading, no gridlines, and trends are easy to follow.



Problems with 3D charts

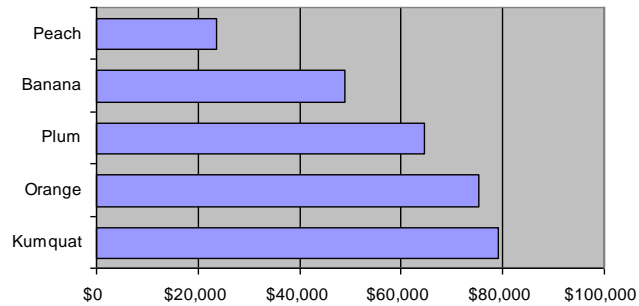


Pie sections in front of screen have distorted emphasis.

Guidelines specific to column and bar charts

- Keep bars and columns wider than spaces between them to focus attention on message
- Label bars and columns when possible, instead of using legends and grids
- Group items for comparison

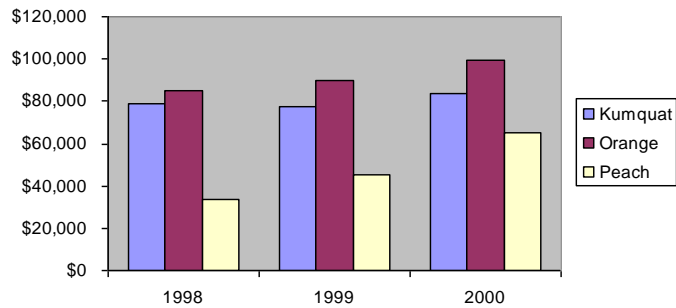
Peach sales are the lowest of software products



Effective for comparing one or several variables.



Peach sales continue to be the lowest of graphics packages



Effective for comparing one or several variables **over time**.

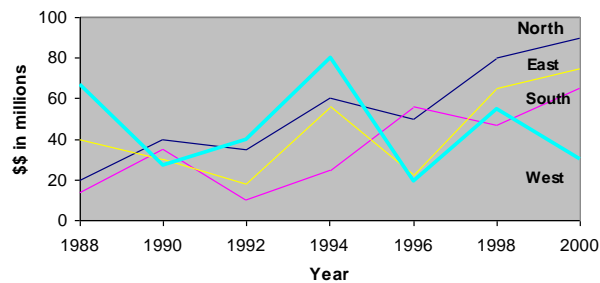


Guidelines specific to line charts

- Reserve the heaviest line for the most important variable or component
- Use a variety of broken lines for other variables
- Anchor data lines to the left axis



Line charts show changes in time of 1 or more variables



More effective than column charts when you have more than 4-5 data points.

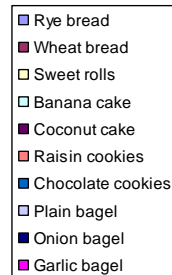
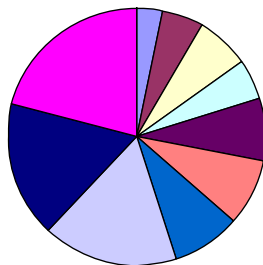


Guidelines specific to pie charts

- Limit the number of components to five or fewer
- Highlight your message by exploding the most important segment
- Place the most important component at the 12 o' clock position and use darker shade to show emphasis



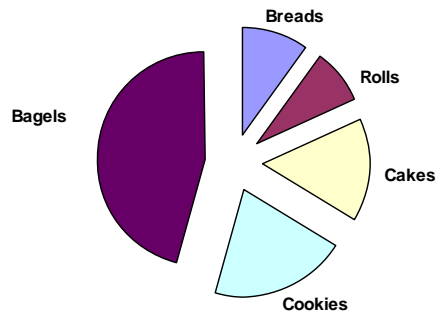
Bagels are our best sellers



Too much detail obscures main message.



Bagels are our best sellers



Based on the message, this visual is to the point.

Visual support helps people remember your message

- Design visuals that add to presentation
 - Keep visual simple
 - One point per visual
- Use the most appropriate form
 - Text visuals preview and summarize and provide transitions
 - Charts show relationships among data
- Keep the audience focused on your message, not on the design features

Questions?

- Thanks for your attention.
- Reminders:
 - No class meeting on Thursday (meet with your client and/or technical advisor)
 - Next management meeting (with me) – March 17
- Next class meeting: Tuesday, March 29.
 - YOUR progress report presentations (use these tips!)

