Project Presentation Notes

Who Are You
Affiliation is Key

Presentation Prep

• How many of you....
  – Had fault tolerance?
    • Flash drive
    • Uploaded to Box
  – Were pro-active?
    • Tested before class
    • Checked if your presentation rendered
  – Did validation?
    • Dry run, more than one dry run
    • Video-taped / watched?

Tip: Rapid jump to a slide, type the # and then press enter
Which slide is this?
Presentation - Overview

- Did your slides?
  - Introduce non-experts to why your topic is important
  - Have a graphic describing the process
  - Explain / visualize key problem (project)
Presentation

- Tone / voice
  - Soft / meek?
  - Loud enough?
  - Speak at board vs. speak to class?
- Nervous?
  - Um, um, um
- Pacing

- Practice, practice, practice

KISS

- Keep It Simple, Stupid
- Rule of thumb
  - Tell me what you are going to tell me
  - Tell me
  - Tell me what you told me
- HCI Principles
  - White space
  - Grouping / proximity / balance
  - Coloring
Not So Keep It Simple Stupid (!KISS)

• KISS stands for Keep It Simple, Stupid and is extremely important for making your slides easier to understand.
• Rules of thumb that you should follow.
  – Tell me what you are going to tell me. This should be short and sweet but it foreshadows what is important.
  – Tell me what you are going to tell me. This is the meat of the talk and really your focus.
  – Tell me what you told me. Summarize and offer conclusions to your audience such that the audience can remember what you just told them.
• Human Computer Interface (HCI) Principles
  – White space is EXTREMELY critical. If you do not have sufficient white space, your slides are harder to digest. Sort of like this example.
  – Grouping / proximity / balance. You must keep your slide content grouped together. Things that appear together seem to be related whether you want your reader to view them as related or not. Don’t forget to keep your slides balanced.
  – Coloring. Using bad colors or poor contrast can make your slides hard to read. For instance, you are probably struggling on reading this set of text.

If your presentations need help, get this book

Edward Tufte, The Cognitive Style of PowerPoint
Public Speaking Tips

• Know your subject

• Know your audience
  – What’s in it for me?

• Structure
  – Particularly crucial for shorter talks

• Your style
  – Find your own voice
  – But seek to entertain as well as educate

Your Style

• “Good teaching is one fourth preparation and three fourths theater.” Gail Godwin

• Use eye contact, voice modulation, and animation (yours, not PowerPoint’s)

• Take chances (but be tasteful)
Public Speaking Tips

• Limited recall
  – “The magical number seven, plus or minus two”
  Miller GA. Psychol Rev 1956. 63:81

• Emphasize key points
  – Don’t attempt the Vulcan mind meld
  – “If you only remember one thing…”

Effective Habits

• Outline the talk before opening any presentation software

• Scientific Presentation
  – Background
  – Objective
  – Methods
  – Data
  – Discussion
Effective Habits

• Prepare in advance!
  – “It usually takes more than three weeks to prepare a good impromptu speech.” Mark Twain

• Practice
  – Particularly the introduction

• Peer review
  – Is the story coherent?
  – Is the presentation of data clear?
  – Eliminate ypographical errors

We Still Are Engineers

• Don’t forget your audience
  – Technical content is OK
  – Some density is OK
    • Sometimes you can’t avoid it

• Polish slides/presentation to make your outstanding content GREAT
Talk Premise

Management during operations is often an after-thought of system design, not a first order property.

The modern **digital spelunking** that typifies system management is untenable in the face of increasing system **scale**.

Furthermore, **limited resources** are choking on nearly **useless data** without providing insight to the network “**system**” **behavior**.

How do we better enable management?  **Lockdown**

Example

What if We Could Measure It?

- **Prevalence**: How often do we see nodes in close proximity?
- **Stability**: How stable are the relationships when we see them?
- **Reciprocity**: How reciprocal are the relationships?

This is what our paper sets out to do. Measuring potential on a live network over 15 months.
Text -> N’est pas tres bien

Why existing tools fail...

user compromised admin

Active Directory

SSH PAM
Log Files

Examine log files

Kerberos Server

User

Host 1

Host 2

Host N

3 hours later ...

User

admin

OK

Alert

Thank you for your interest in browsing our catalog. It's easy and it's efficient! Adobe Acrobat Reader 4.0 uses a 'Pointing Finger' with a 'V' for a mouse pointer whenever you encounter an area where a 'Selection' can be made. When the catalog index page appears, you will notice that the 'Pointing Finger' will appear when you pass over an index item (Product Type) that is selectable. If you click on an item, the pages related to that product will be downloaded to you. Each page has been modularized so that the typical download times with a 56K modem will not exceed 60 seconds with the average download time less than 20 seconds. Depending on your Browser, you may not see a time line, just be patient and the pages will appear. In some cases, another index page will appear requiring further selection. The same process should be followed. Using the pages in Acrobat Reader is easy and efficient and in a short time you will be an expert at it. To return to the previous index, simply click your Browser 'Back' button. Two other configurations of mouse pointers are also used by Acrobat Reader. An 'Open Hand' for moving the page around and a 'Magnifier' for zooming in and out while viewing the page. You may select either one from the tool bar at the upper part of the screen. Please carefully jot down the Model Numbers of interest so that they can be entered accurately in the on-line ordering system.
Will this render well on a washed out screen?
Optimization problem

- Bandwidth unit-price function

\[
p(S, R, P) = p \left( \sum_{i=2}^{n} S_i, R, \min(P_{2}, P_{n}) \right) > 0
\]

Unused residual spectrum bandwidth

\[
\begin{align*}
\min & : \left| R - \sum_{i=2}^{n} b_i \right| , & b_i = & \begin{cases} 
S_i, & \text{if } p(S, R, P) \leq r_i \\
0, & \text{if } p(S, R, P) > r_i
\end{cases} \\
\max & : \sum_{i=2}^{n} \pi_i , & \pi_i = (r_i - p(S, R, P)) \cdot S_i
\end{align*}
\]

Valuation of the spectrum by the secondary users
Graph distance

Distances between network graphs

Point out interesting areas of your graphs

For instance, yellow for a line was a bad idea

Yes, your selection of 10 point font is totally readable, thank you for testing my recent LASIK

Figures

• Redraw in PowerPoint / Keynote
  – Please do not copy / paste
  – Same for graphs
• But that is hard and time-consuming
  – Yes
Presentation of Data

• PowerPoint conveys data at relatively low bandwidth

Tables, Charts, and Graphs

• Avoid tables & figures from journals – they do not project well

• Tables & figures should be clearly labeled, and make sense at a glance

• Orient the audience & walk them through the data

Tables, Charts & Graphs

• You’ve failed if you have to begin with an apology

• Limit data to what is necessary to convey your point
  – But don’t deceive

• Highlight key points
ACE Inhibitors and Mortality Reduction

<table>
<thead>
<tr>
<th>Trial</th>
<th>ACEI</th>
<th>Controls</th>
<th>RR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic CHF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONSENSUS I</td>
<td>39%</td>
<td>54%</td>
<td>0.56 (0.34–0.91)</td>
</tr>
<tr>
<td>SOLVD (Treatment)</td>
<td>35%</td>
<td>40%</td>
<td>0.82 (0.70–0.97)</td>
</tr>
<tr>
<td>SOLVD (Prevention)</td>
<td>15%</td>
<td>16%</td>
<td>0.92 (0.79–1.08)</td>
</tr>
<tr>
<td>SAVE</td>
<td>23%</td>
<td>23%</td>
<td>0.61 (0.50–0.97)</td>
</tr>
<tr>
<td>AIRE</td>
<td>17%</td>
<td>23%</td>
<td>0.73 (0.60–0.89)</td>
</tr>
<tr>
<td>TRACE</td>
<td>35%</td>
<td>42%</td>
<td>0.78 (0.67–0.91)</td>
</tr>
<tr>
<td>SMILE</td>
<td>6.5%</td>
<td>8.3%</td>
<td>0.78 (0.52–1.12)</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>21%</td>
<td>27%</td>
<td>0.77</td>
</tr>
</tbody>
</table>

*P <.05

US Carvedilol Heart Failure Program: Effect on Hospitalizations

- **Placebo** (n = 398)
- **Carvedilol** (n = 696)

Duration of therapy: 6.5 months (median)

*P <.05
Age-Adjusted Prostate Cancer Incidence and Mortality

The 10 Minute Talk

- The research equivalent of the oral case presentation
  - Structure is incredibly important

- Background/significance
- Objective
- Methods
- Results
- Discussion/future
The 10 Minute Talk

- Very little time
- Make every word count
- Seek early feedback
- Memorize the beginning (first impressions)
- Practice, practice, practice

The Delivery

- Redundancy
  - Computer, webmail, USB flash drive, CD
  - Include all files necessary for any animation (e.g. video)
- Get there early, check out the room, controls, water
- Ask a friend/colleague for feedback
  - Learn something from every talk
Final Thoughts

- For goodness sakes, don’t read your slides!
- Use animations sparingly
- Attention span may be 10-15 minutes
  – Perhaps less in the age of Twitter
- Various techniques to re-engage the audience
- Practice
- Get there early, check out the room, controls, water
- Be knowledgeable, enthusiastic, and animated
- Focus on a few take home points
- Attend seminars!

Weekly Seminar

WHAT YOU BROUGHT TO SEMINAR AND WHAT IT SAYS ABOUT YOU:

- Stuff to take notes: First year. Foolishly thinks he’ll ever need notes again.
- Reading material: Third year. Just here for show.
- Didn’t bring anything: ABD/PhD. Nothing better to do.
- Laptop: Young assistant professor. Working on three proposals at the same time.
- Playing with latest gadget: Full professor. Loooves new toys.
“Everything should be made as simple as possible, but not one bit simpler.” Einstein

“Make sure you have finished speaking before your audience has finished listening.” Dorothy Sarnoff