exemath

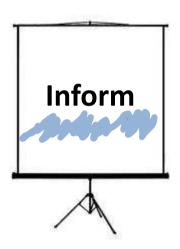


Art of a Technical Presentation

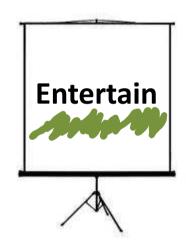
Fernando Rosario

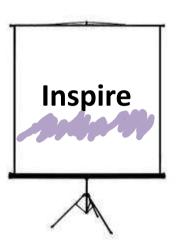
What are you trying to accomplish?





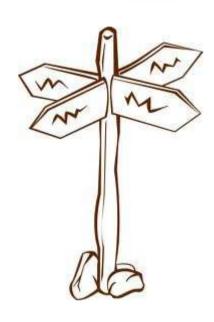






The best presentations





- ✓ ... are summarized in one sentence
- ... have something real and interesting
- ✓ ... are well-organized
- ... are excuse free presentations
- ✓ ... create a connection with the audience
- ... have a roadmap

Common pitfalls





- Presenting everything you know
- Overwhelming the audience
- Poorly made audiovisuals
- Monotonous presentation
- Delivering cold and hard facts
- Intimidation by the audience
- Failure to summarize

3 Simple rules



Step 1 Tell them what you are going to tell them



Step 2 Tell them



Step 3 Tell them what you told them

Preparation is 80% of the work

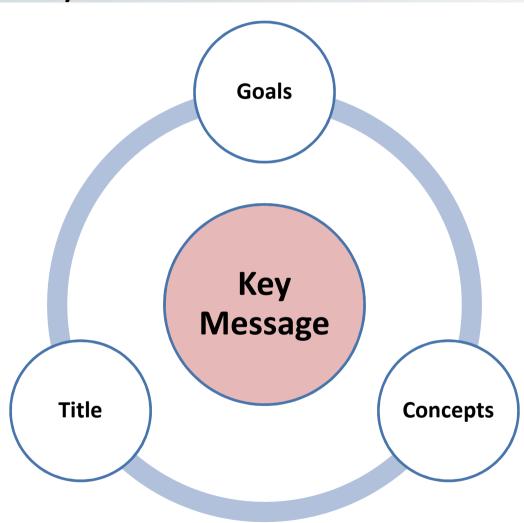




Preparation and practice is what makes a speaker

Imagine your audience would memorize only one sentence





Speak their language (know the audience)







Knowledge



Interests



Background



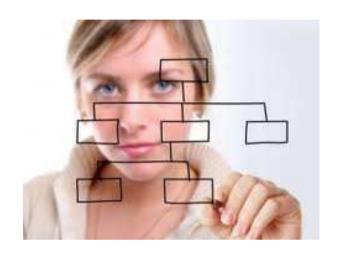
Needs



Success Factors

Don't even attempt to present without an outline





- ☐ Key points
- Concepts
- ☐ Climax
- ☐ Logical sequence

All elements must support the **key message**

Your job is mostly to select content









Tailored Content



Only Important Sentences



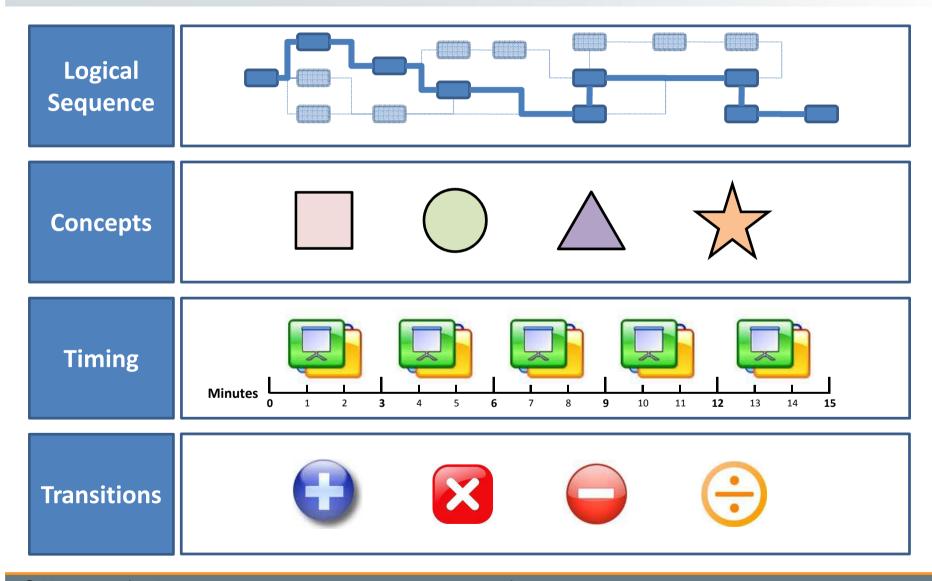
A Place For Everything



Summarize Into One Sentence

Your slides must tell a story





Title:

- Clear and Descriptive
- Unique

Visuals:

- Simple
- Limit the number of charts, tables, and diagrams
- Enhance the spoken word

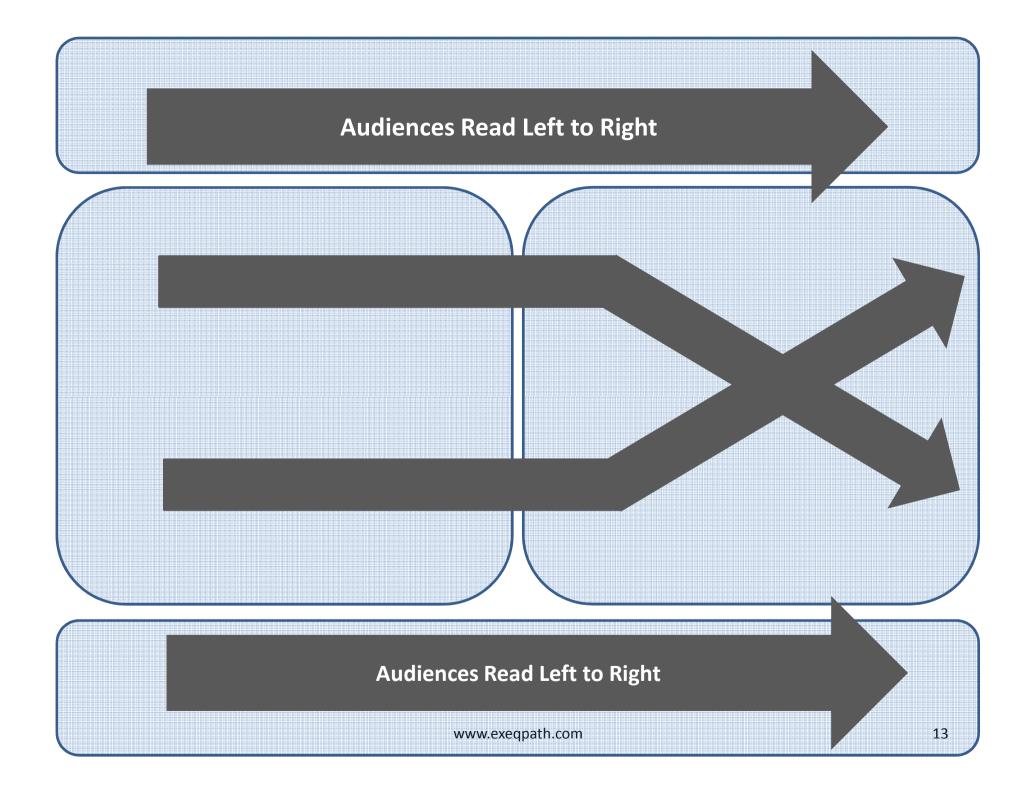
Text:

- Only necessary information
- In order of importance
- Do not mix topics

I M P O R T A N C E

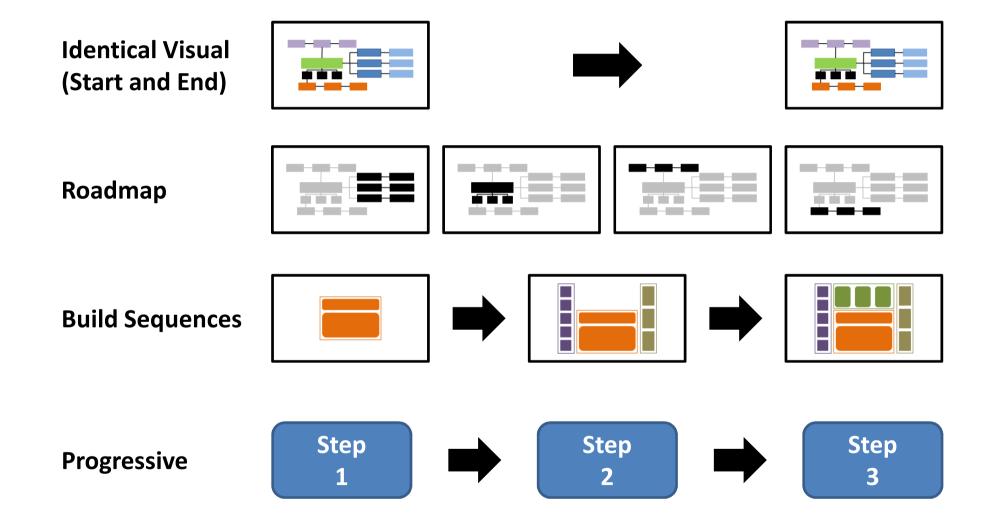
Legends, Footnotes, Reminders:

- Notes / Clues
- Clarifications



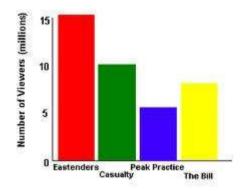
Transitions help the audience understand how successive stages are related to each other





Images and visualizations are extremely powerful





- ☐ Include **diagrams** to show how your system works
- ☐ Never include **generic images**
- Complement math equations with a graphical one
- ☐ Figures should **stand on their own**
- ☐ Replace raw data with relationships (Tables, Charts, and Graphs)

Strive for simplicity

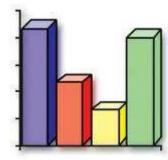


Complex Equations

$$V_{c} = \int_{c_{1}}^{c_{2}} \left[(\omega \times \mathbf{r}) \times \mathbf{B} \right] d\mathbf{r}$$

$$=\frac{\mu\omega}{R_c}\left(\cos^2\lambda_2-\cos^2\lambda_1\right)$$

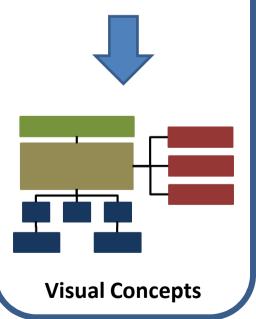




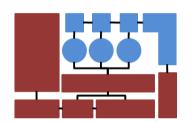
Charts & Graphs

Textual Context

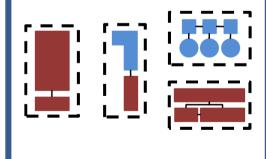
- SQL Server Backend
- Enterprise Service Bus
- File Transfer Protocol
- Cust. Relationship Mgmt.
- Enterprise Res. Planning
- Active-Active Data Centers



Complex Systems







Simpler Systems

Live demo's are risky





- ☐ Know every inch of your demo
- Plan for the worst
- Practice and have a backup plan

Your mistakes should teach them, your demos should teach them; even your shortcut keys, utilities and menu layout should teach them

Do not give a presentation that you have not run through out loud!





Read the presentation silently



Practice out loud



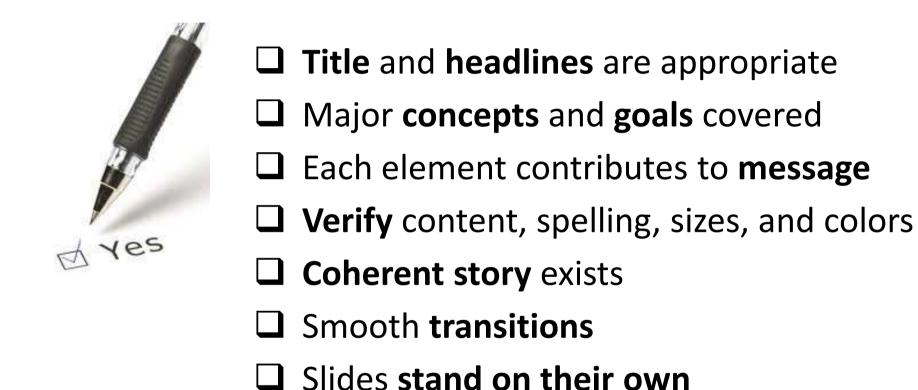
Videotape yourself



Rehearse with colleagues / friends

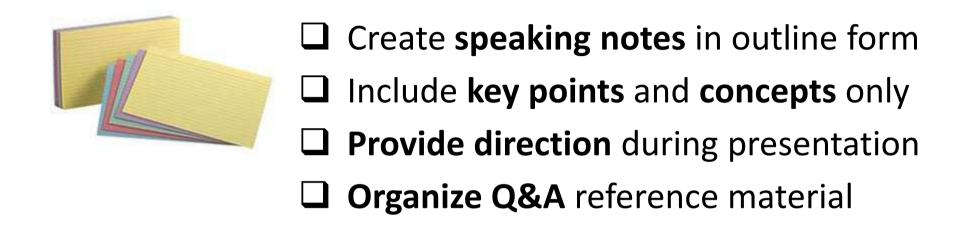
Validation checklist





Do not create a complete script





Well-designed presentations should eliminate the need for notes

The best work is useless if not communicated effectively









Communicate Ideas Clearly



Use Repetition



Manage the Audience

Opening:

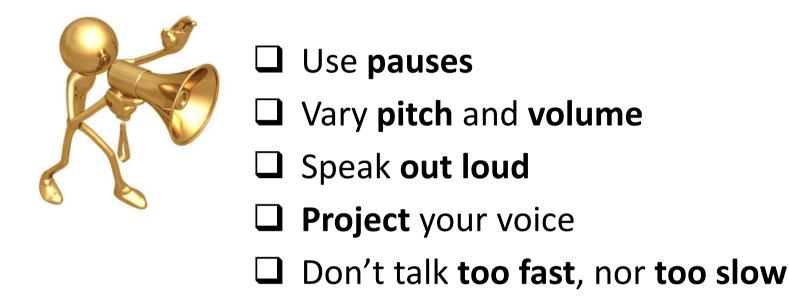
Catch the interest and attention of the audience

Closing:

Summarize the main concepts you presented

Don't speak in a monotone voice





☐ Breathe slowly and deeply

The bulk of your persuasive work is done in the body





- ☐ Make **eye contact**
- Know when to move and not to move
- ☐ Smile
- ☐ Read audience feedback
- ☐ Always face the audience
- ☐ Use your hand as a laser pointer

Answering questions is hard





- ☐ Wait for the questioner to finish
- ☐ Repeat the question
- Be willing to say "no" or "I don't know"
- ☐ Anticipate the questions
- ☐ **Practice** answering questions

Things to avoid





- ☐ ... using **jargon**
- ... reading your slides or script
- ☐ ... **skipping** around a lot
- ☐ ... incorrect use of **humor**
- ☐ ... **memorize** content
- ☐ ... improvisation
- ☐ ... last minute **changes**

The day of the presentation





- ✓ Familiarize yourself with surroundings
- ✓ Visualize the opening
- Run through your talk once more
- Read your notes
- ✓ You are in control, not the audience
- Be prepared for interruptions
- Mingle with the audience
- ✓ Take deep breaths

In summary





- Identify the key message
- Create a strong outline
- Prepare supporting content and visuals
- Practice and validate
- ✓ Deliver an excuse-free presentation

If this sounds like a lot of work, it is ...but the results pay off