

Home Page

Title Page

Contents



Page 1 of 15

Go Back

Full Screen

Close

Quit

Electronic Presentation Sans Microsoft PowerPoint

Sharat Chandran

Computer Science & Engineering Department,
Indian Institute of Technology,
Bombay.

www.cse.iitb.ac.in/~sharat

October 4, 2002

Home Page

Title Page

Contents



Page 2 of 15

Go Back

Full Screen

Close

Quit

Overview

1. Electronic presentation has become important

Home Page

Title Page

Contents



Page 2 of 15

Go Back

Full Screen

Close

Quit

Overview

1. Electronic presentation has become important
2. What's so special about electronic documents?

Home Page

Title Page

Contents



Page 2 of 15

Go Back

Full Screen

Close

Quit

Overview

1. Electronic presentation has become important
2. What's so special about electronic documents?
3. Options
 - Microsoft PowerPoint
 - T_EX friendly solutions
 - Other (Magicpoint)
4. Tips and techniques
 - Figures and Images
 - Algorithms and Mathematics
5. Resources
6. Where do we go from here?

Home Page

Title Page

Contents



Page 3 of 15

Go Back

Full Screen

Close

Quit

About Electronic Presentations

- Many disadvantages, but a few reasons to go with the tide
 - Classic: Saves paper, plastic. Easier to retrieve and store.
 - Often Attractive.
 - Occasionally beneficial: Easier to navigate. Easier to teach (for example, spatial data structures). Easier to learn.
- Things to keep in mind
 - Page layout: Matching screen dimensions, aspect ratio
 - Adding emphasis: Color, animation
 - Adding links: Enabling the user to navigate

Home Page

Title Page

Contents



Page 4 of 15

Go Back

Full Screen

Close

Quit

About Microsoft PowerPoint

- Front runner (for non technical presentations)
- Several advantages: Robust, Large number of templates, Excellent integrated graphic tool, animation support, link support, WYSIWIG, audience notes
- A few disadvantages: Not light weight, poor math support, imprecise placement, limited export options
- Key Point: Your technical report is not written in PowerPoint!
- Magic Point has different limitations

Home Page

Title Page

Contents



Page 5 of 15

Go Back

Full Screen

Close

Quit

Turning to L^AT_EX And Friends

- Why? Why Not? (Compare previous slide on disadvantages)
 - What's possible: Use of color, links
 - (In addition) What's the promise: Beautiful math, More control
 - What's the drawback: Embedded and other animation, Runtime Overlay
- How?
 - Use an appropriate document class: slides, foils, seminar
 - Use appropriate packages: color, hyperref
 - Use other tools: Acroread, Browsers (IE), mpegplay, realaudio
- Examples to follow

Home Page

Title Page

Contents



Page 6 of 15

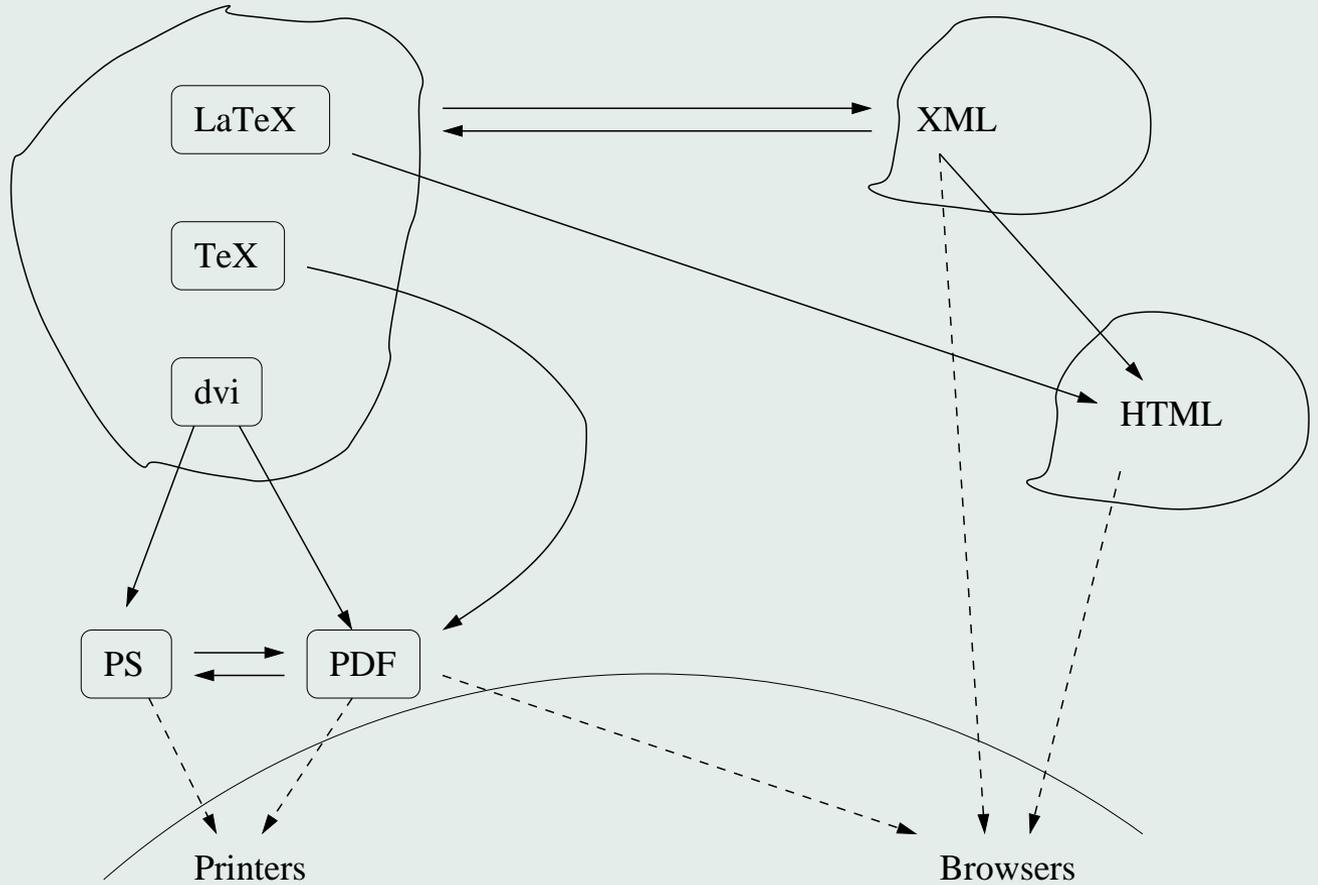
Go Back

Full Screen

Close

Quit

Overview of Strategies



Comparisons of Strategies

- Can't stay with `dvi`.
 - Color, link, fonts cause problems.
 - Special versions of drivers can handle these.
 - `xdvi`, `dviwindo`, `dviout` are not really presentation tools
- Downgrade to HTML using `latex2html`, `tth`, `TeX4ht`
 - Beautiful browsers are available. Lightweight solutions if pure text or straightforward \LaTeX . Also consider MathML.
 - Weak math support (math is translated to images)
 - Plugin solution is possible (IBM TechExplorer)
 - Precise placement is a problem.
- Work with PDF
 - Factor of two size increase as compared to `dvi`
 - Acroread is universal, and acceptable as a presentation tool

Wrinkles in the L^AT_EX World

- The good news: standard L^AT_EX document classes handle the basic issues of presentation (large size font, overlays, self contained pages, vertically centered pages)
 - The `slides` document class: Standard but lacks bells and whistles
 - The `foiltex` has restricted licenses (copyright owned by IBM)
 - The `seminar` document class is free, and has a long history. Standard in Redhat teTeX distribution.
- The bad news: Which T_EX to use?
 - Problem: color is non standard. Need to convert to pdf using `dvipdf`. (`ps2pdf` is not an option)
 - Accept this reality and work with `pdflatex` but debugging with `pdflatex` and `acroread` is very slow
- Possible solution: Work with both teTeX and `pdflatex`!

Home Page

Title Page

Contents



Page 9 of 15

Go Back

Full Screen

Close

Quit

A Few Words on the seminar class

- Mix both portrait and landscape in presentation (impossible in PowerPoint?!)
- Recommended for presentations: `\documentclass{seminar}` and `\usepackage{graphicx,times,semrot,sem-a4}`
- For foils, use the `portrait` option.
- Make frames using the `fancybox` package (Can put background text too).
- Color handled with `\usepackage[dvips]{pstcol}` `\usepackage{semcolor}`
- Can have default logo at the bottom
- And a list of slides!

Home Page

Title Page

Contents



Page 10 of 15

Go Back

Full Screen

Close

Quit

About PDF

- Compressed descendant of the PostScript language
 - Not a programming language (has JavaScript support though)
 - Page independent from resources
 - Hypertext and security supported
 - Font need not be part of the document
- Adobe makes money in the create PDF process (specs are open)
- Can be used to create *forms* (like HTML forms) with textfield, checkboxes, and so on.

Home Page

Title Page

Contents



Page 11 of 15

Go Back

Full Screen

Close

Quit

About hyperref

- A \LaTeX front to generate marks understood by Acrobat
- Extends cross-referencing commands
- Supported by xdvi, dvips, pdftex, dviipdfm
- Two common packages (colorlinks, backref)
- Can be used to control the acrobat menu (bookmarks, toolbar, and so on).

Home Page

Title Page

Contents



Page 12 of 15

Go Back

Full Screen

Close

Quit

About pdfscreen

- Wrapper around hyperref to make attractive screen presentations
- Panels to let you navigate
- Automatic color screen
- Page transitions are also provided

Home Page

Title Page

Contents



Page 13 of 15

Go Back

Full Screen

Close

Quit

Options to Explore

- ppower4: Postprocessor to enable incremental additions to pages
- texpower: Similar, doespage transitions, color highlighting and incremental page display
- propser: A powerpoint lookalike built on top of seminar
- ifmslide: Built on top of texpower

Other Tools

- xfig
 - LaTeX text within xfig (psfrag is more general)
 - * Write text, and tag it as “special”.
 - * `% fig2dev -L pstex_t -p test.eps -m 0.8 test.fig >test.pstex_t`
 - * `\input{test.pstex_t}`
 - Use of grids, update
- Images
 - Aligning (Judicious use of the minipage environment or xfig)
 - includegraphics handles many different kinds of image formats
 - fig2dev, convert
- The listings, and subfigure packages

[Home Page](#)

[Title Page](#)

[Contents](#)



Page 15 of 15

[Go Back](#)

[Full Screen](#)

[Close](#)

[Quit](#)

Resources

- The L^AT_EX book
- The companion books (Goosens)
- D.P. Story's [article](#).
- Michael Wiedmann survey.
- The seminar and the pdfscreen homepage.
- The guide to working with images epslatex.ps
- pdftex faq