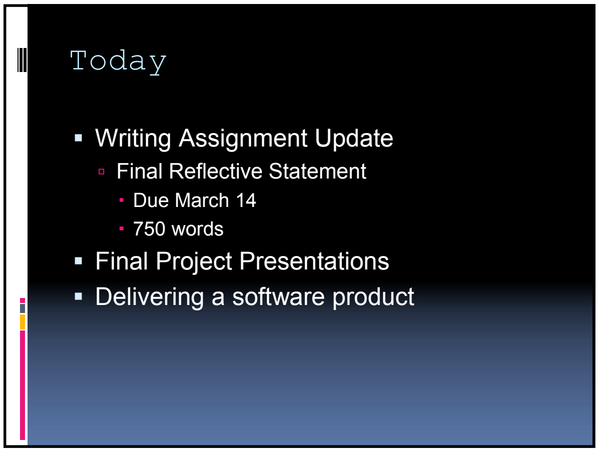
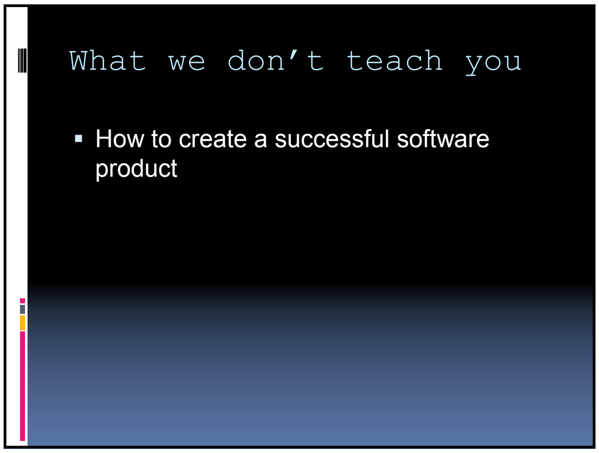
CSE 481b
Winter 2007

DELIVERING A SOFTWARE PRODUCT



Today

- Writing Assignment Update
  - Final Reflective Statement
    - Due March 14
    - 750 words
- Final Project Presentations
- Delivering a software product



What we don’t teach you

- How to create a successful software product

CSE 481b

- Build a prototype application
- Convince management you could build a successful product

- Management Pitch
  - High Stakes
  - Single presentation

Take away

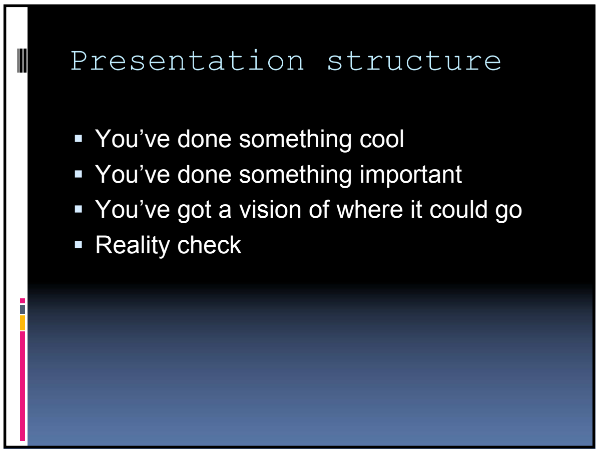
- What is the one thing that you want management to remember

Group A

Group B

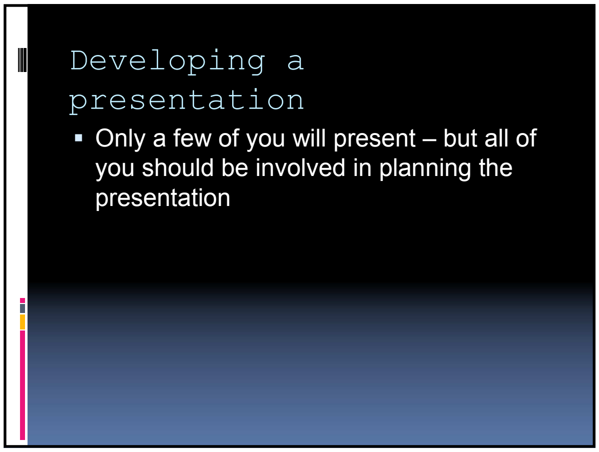
Group C

Group D



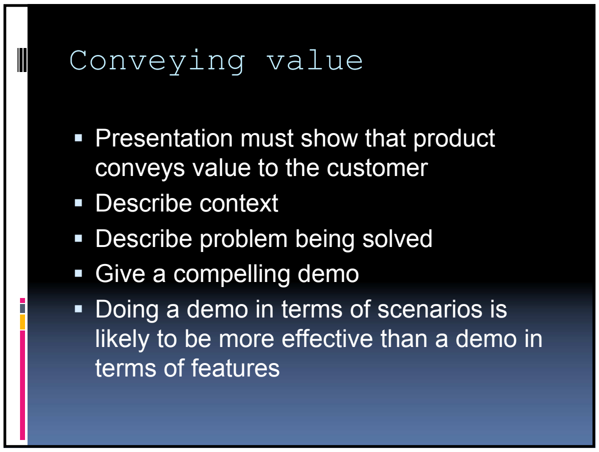
Presentation structure

- You’ve done something cool
- You’ve done something important
- You’ve got a vision of where it could go
- Reality check



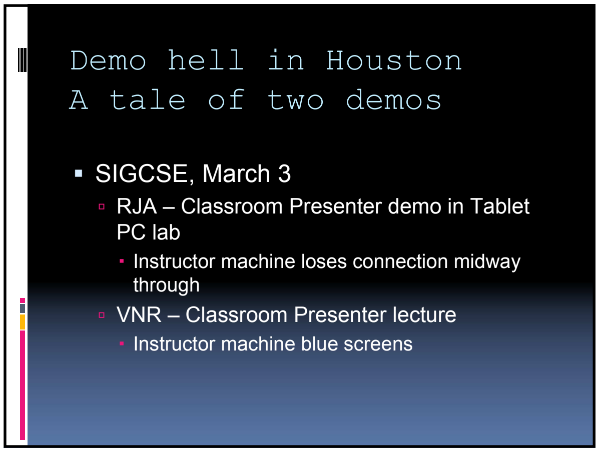
Developing a presentation

- Only a few of you will present – but all of you should be involved in planning the presentation



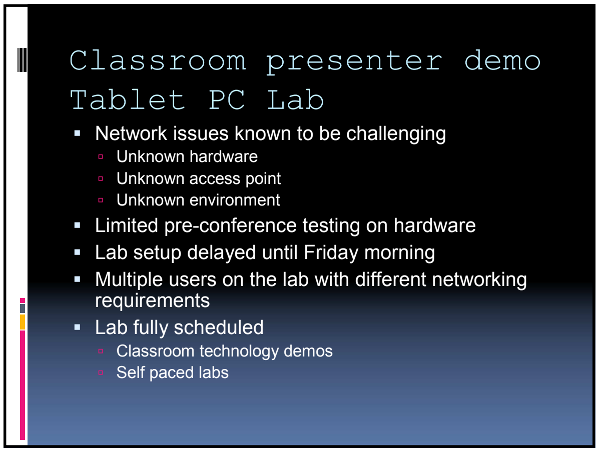
Conveying value

- Presentation must show that product conveys value to the customer
- Describe context
- Describe problem being solved
- Give a compelling demo
- Doing a demo in terms of scenarios is likely to be more effective than a demo in terms of features



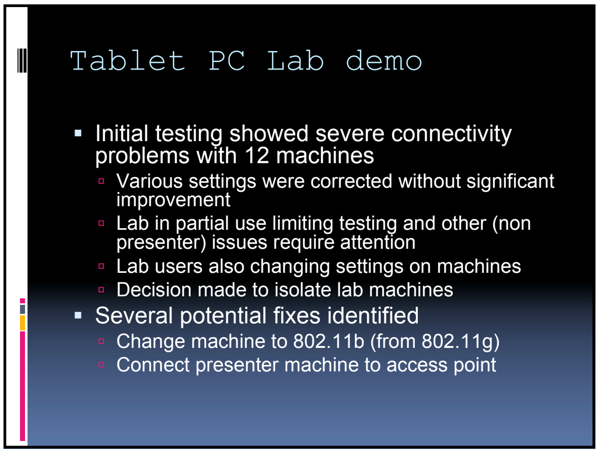
Demo hell in Houston
A tale of two demos

- SIGCSE, March 3
  - RJA – Classroom Presenter demo in Tablet PC lab
    - Instructor machine loses connection midway through
  - VNR – Classroom Presenter lecture
    - Instructor machine blue screens



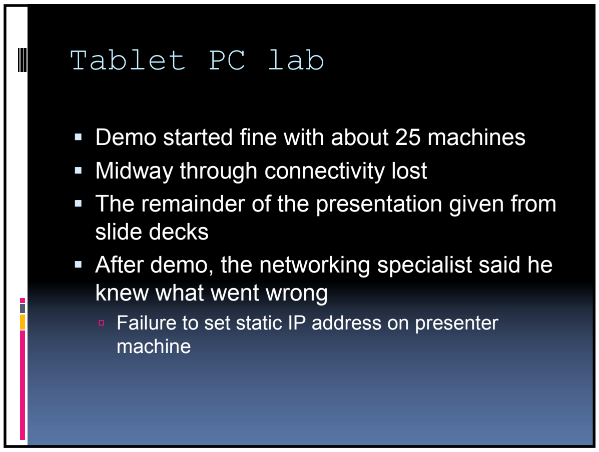
Classroom presenter demo
Tablet PC Lab

- Network issues known to be challenging
  - Unknown hardware
  - Unknown access point
  - Unknown environment
- Limited pre-conference testing on hardware
- Lab setup delayed until Friday morning
- Multiple users on the lab with different networking requirements
- Lab fully scheduled
  - Classroom technology demos
  - Self paced labs



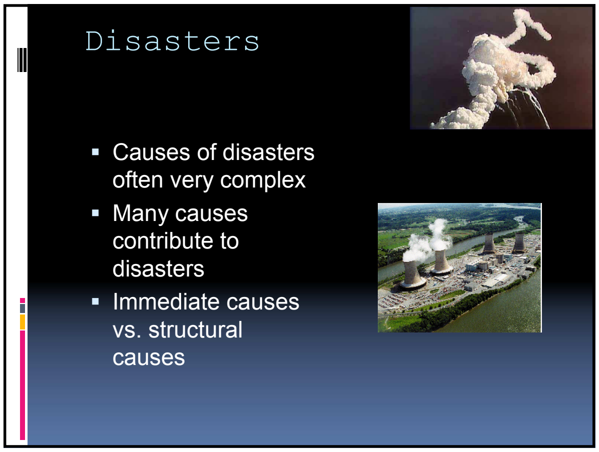
Tablet PC Lab demo

- Initial testing showed severe connectivity problems with 12 machines
  - Various settings were corrected without significant improvement
  - Lab in partial use limiting testing and other (non presenter) issues require attention
  - Lab users also changing settings on machines
  - Decision made to isolate lab machines
- Several potential fixes identified
  - Change machine to 802.11b (from 802.11g)
  - Connect presenter machine to access point



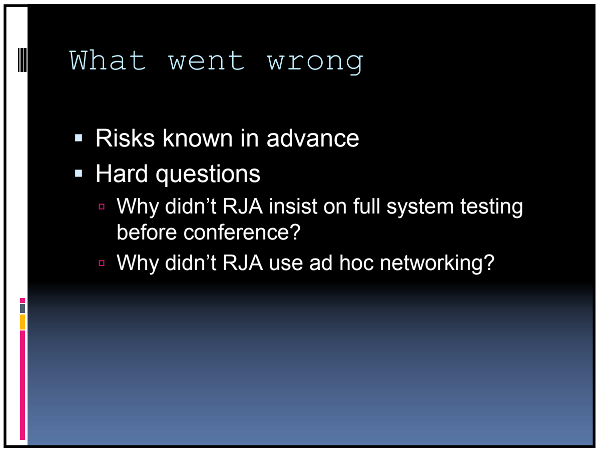
Tablet PC lab

- Demo started fine with about 25 machines
- Midway through connectivity lost
- The remainder of the presentation given from slide decks
- After demo, the networking specialist said he knew what went wrong
  - Failure to set static IP address on presenter machine



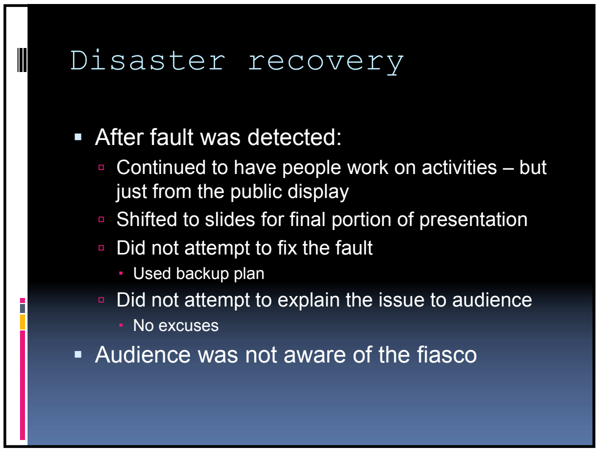
Disasters

- Causes of disasters often very complex
- Many causes contribute to disasters
- Immediate causes vs. structural causes



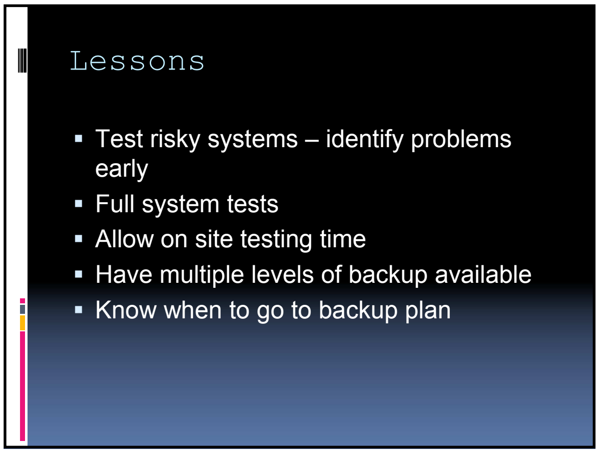
What went wrong

- Risks known in advance
- Hard questions
  - Why didn't RJA insist on full system testing before conference?
  - Why didn't RJA use ad hoc networking?



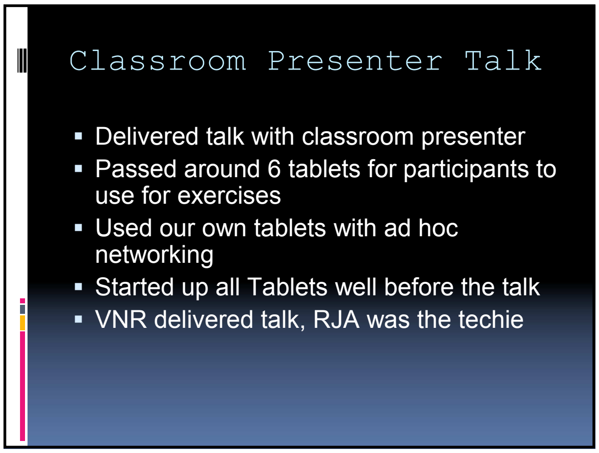
Disaster recovery

- After fault was detected:
  - Continued to have people work on activities – but just from the public display
  - Shifted to slides for final portion of presentation
  - Did not attempt to fix the fault
    - Used backup plan
  - Did not attempt to explain the issue to audience
    - No excuses
- Audience was not aware of the fiasco



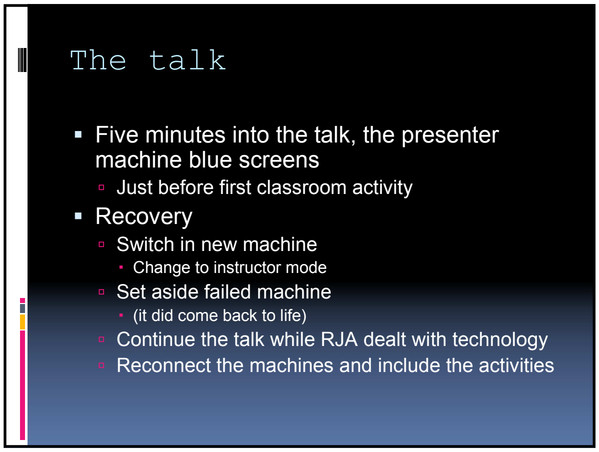
Lessons

- Test risky systems – identify problems early
- Full system tests
- Allow on site testing time
- Have multiple levels of backup available
- Know when to go to backup plan



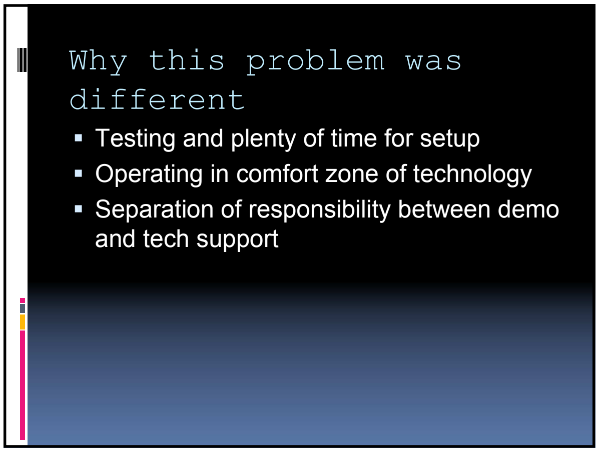
Classroom Presenter Talk

- Delivered talk with classroom presenter
- Passed around 6 tablets for participants to use for exercises
- Used our own tablets with ad hoc networking
- Started up all Tablets well before the talk
- VNR delivered talk, RJA was the techie



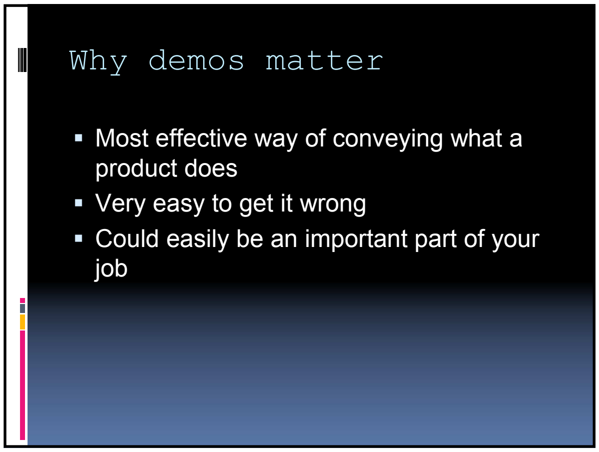
The talk

- Five minutes into the talk, the presenter machine blue screens
  - Just before first classroom activity
- Recovery
  - Switch in new machine
    - Change to instructor mode
  - Set aside failed machine
    - (it did come back to life)
  - Continue the talk while RJA dealt with technology
  - Reconnect the machines and include the activities



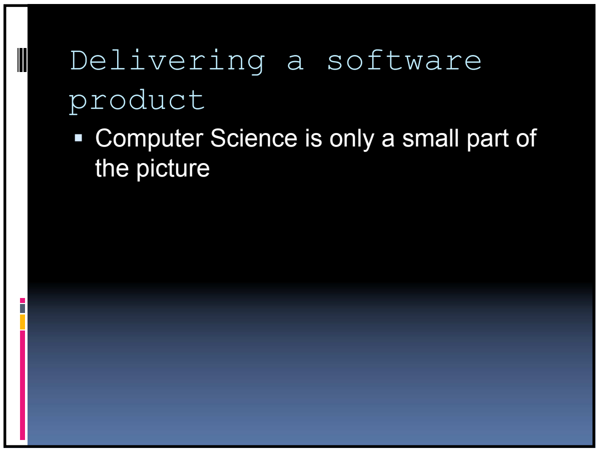
Why this problem was different

- Testing and plenty of time for setup
- Operating in comfort zone of technology
- Separation of responsibility between demo and tech support



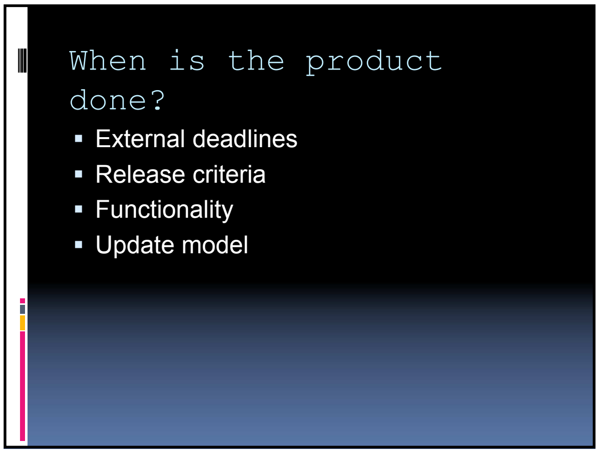
Why demos matter

- Most effective way of conveying what a product does
- Very easy to get it wrong
- Could easily be an important part of your job



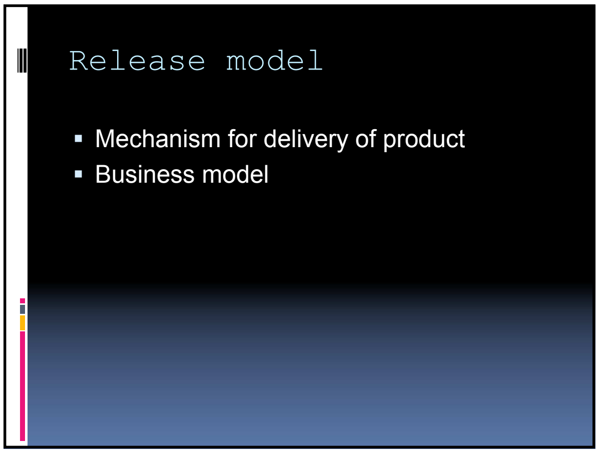
Delivering a software product

- Computer Science is only a small part of the picture



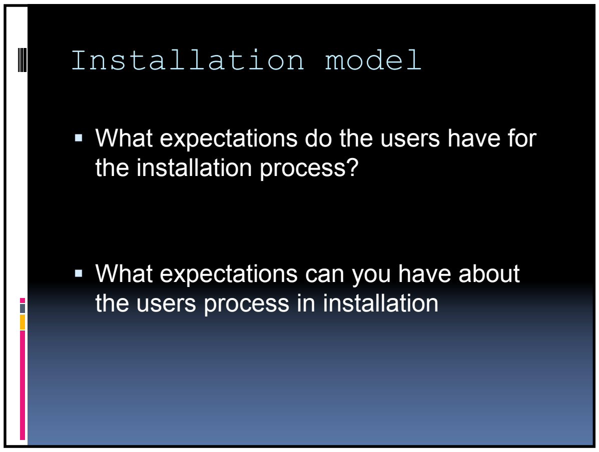
When is the product done?

- External deadlines
- Release criteria
- Functionality
- Update model



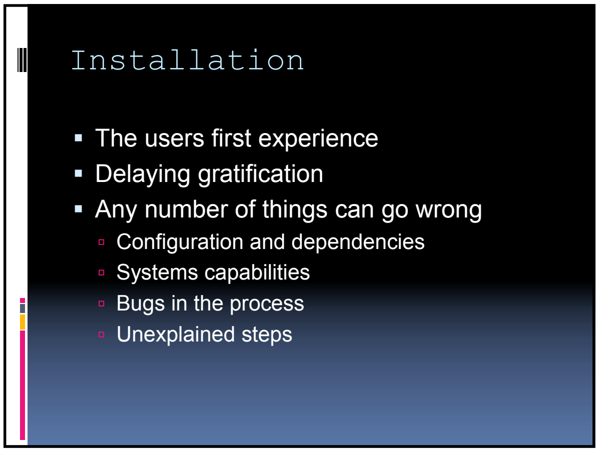
Release model

- Mechanism for delivery of product
- Business model



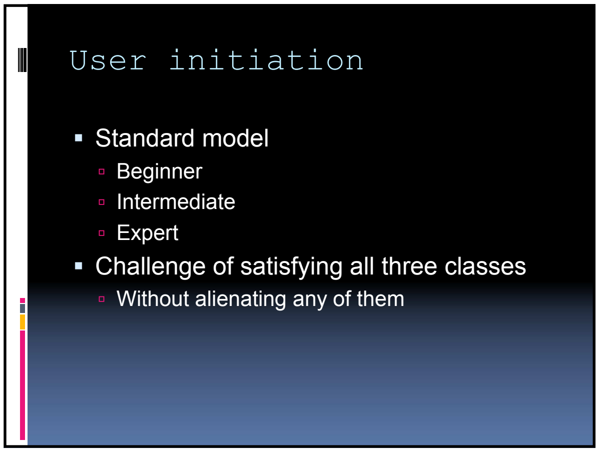
Installation model

- What expectations do the users have for the installation process?
- What expectations can you have about the users process in installation



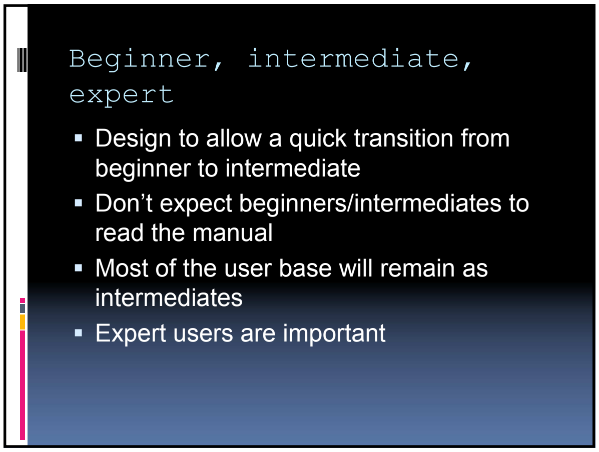
Installation

- The users first experience
- Delaying gratification
- Any number of things can go wrong
  - Configuration and dependencies
  - Systems capabilities
  - Bugs in the process
  - Unexplained steps



User initiation

- Standard model
  - Beginner
  - Intermediate
  - Expert
- Challenge of satisfying all three classes
  - Without alienating any of them

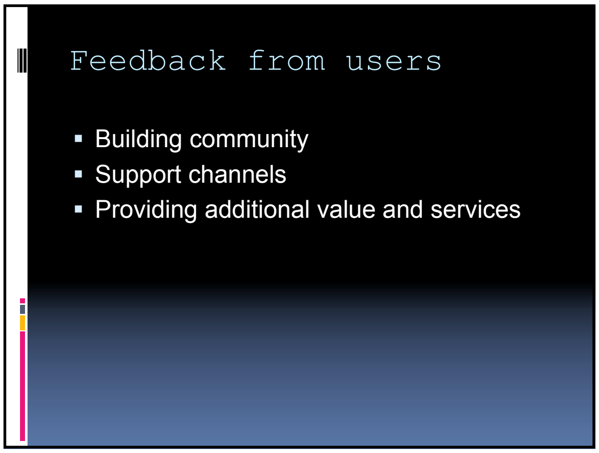


Beginner, intermediate, expert

- Design to allow a quick transition from beginner to intermediate
- Don’t expect beginners/intermediates to read the manual
- Most of the user base will remain as intermediates
- Expert users are important

Product Maintenance

- When its done – the work is just beginning
- Bug fixes
- Updates
- The next version



Feedback from users

- Building community
- Support channels
- Providing additional value and services