



WINDOWS 3.0 POST MORTEM

Program Management
Meeting Minutes

(date)

Areas Discussed

Schedule
Specifications
Product Definition
Morale
External Resources
Development Organization
Prototyping/Usability Testing
Roles of Groups
(User Ed, Program Management, Marketing,
Development, and Testing).
Supporting and Maintaining Existing Products
Miscellaneous
Testing

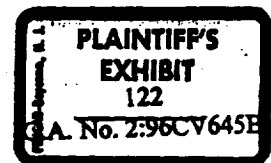
Attendees

Brad Silverberg
Jody Snodgrass
David Cole
Greg Lowney
Tim McCaffrey
Lisa Cran

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Schedule

- Set by BillG (upper management) before feature definitions are outlined.
- Problem motivating people to achieve "fake" ship dates.
- Need to be more realistic in our schedules.
- Bad design decisions made on bad schedules.
- We end up going back to fix the quick and dirty solution; takes longer or we keep patching bad design. Big problem if we lock ourselves into compatibility constraints (API Level).
- Didn't have a good scheduling tool. Tracking schedule was okay, but could have been better with better tools.
- Individual areas tracked by different people. Need to dedicate one person to oversee tracking of the entire schedule.
- Need to do better evaluation of problem areas. Devise flag system.
- Should work with schedules. Managers - summarize and review all areas.
- Make sure management is aware of schedule slips.
- Need to have "check points" during the project.
- Bug fixes were not considered in schedule.
- Rushed to spec the product. Things weren't considered during this process (e.g. 400 mw in original spec, but we add another 600 mw of work to schedule because of unexpected issues).
- Lying to people on the team about schedules. Morale hit to the team.
- How to separate out development schedules and the schedules we give to other groups (USSMD or upper management) without appearing to "lie" to the product team.
- Check points and milestones needed.
- Our milestones were not achievable (i.e. code complete) and we fooled ourselves that they were set.
- We didn't add time to the schedule or remove other features when new tasks/features were added to the product.
- Need to coordinate schedule with all aspects of the product.
- Ended up having to put internal resources on external piece

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Schedule

(Continued)

* Reliance on external resources. We had too many critical pieces from third parties. Takes twice as long and a lot of coordination effort from Program Management.

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Specifications

- Didn't update. No good mechanism for doing this.
- Need to enhance the process. Development needs to be more involved.
- Need architecture spec for communicating to other groups.
- Prototypes will serve as the spec in the future.
- Shouldn't produce too much or too little of a spec up front.
- Specs needed and ownership

Feature spec Windows Program Management owns

Shell spec Shell team owns

Architecture spec Windows Development owns

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Product Definition

- Need to spend quality time on product definition.
- Understand customer needs including end users, corporate accounts, ISVs, internal groups (Internal, Apps, Systems) etc.
- Need to understand the problems which need to be solved.
- Talk to strategic vendors.
- Get feedback from marketing on product definition (we didn't do this in Win 3.0).
- Really understand what our customers will need to do.
- Evaluate the competition.

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Morale

- Getting the team bought into the schedule. They have to feel like they "own" it. If it gets screwed up, it is their fault, not upper management, the team is responsible. Need to make the team feel ownership.

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External Resources

- Need to educate them. It takes resources to do this.
- Different priorities. Hard to change their priorities to match Microsoft's.
- Requires a lot of internal coordination and development support (PSS can't cut it).
- Shouldn't farm out key or critical pieces of the product to third parties. We did this with the shell (Ruby), Paintbrush, comm driver, network support, terminal.

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Development Organization

- Leads are not managing their people as well as we need. Must communicate to their teams better.
- Leads have fulltime job as well as managing a team.
- Need to establish technical leads and managerial leads.

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Prototyping/Usability Testing

- * Didn't do for Windows 3.0
- * Need to do in the future.
- * Lots of UI inconsistencies between key components are a result of not doing this.

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Roles of Groups

(User Ed, Program Management, Marketing, Development, Testing)

- User Ed want to be the designers. Program Management does this. User Ed will only review specs and provide feedback. They should provide input.
- Need to clarify roles better.
- Reduce testing involvement with external vendors. Program Management should manage this.
- Clarify who reports bugs and who manages the relationship with third parties.

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Supporting/Maintaining Existing Products

- Need to establish who will work on which products:
 - New people maintain
 - Key people work on new products
- Need to break down the specialization of skills. Make the team more flexible.
- Transition team should grow to handle maintenance of the product.

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Testing

- No formal testing schedule was defined.
- Mechanism for adding test cases to the test suite is needed (make it easy for adding bug regressions and developer ideas).
- How to force regression testing?
- We need to review successful mechanisms used throughout the company.

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Miscellaneous

- We should run different hardware configurations within our group. Not be so isolated to IBM and Compaq (286/386, clones, etc.)
- We need to also use other system software such as Novell Networks or ATM or Bitstream Facelift Font products.

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