



University of Southern California  
**Center for Software Engineering**

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# **COQUALMO Breakout Group Summary**

## **COCOMO/SCM FORUM 17**



## PARTICIPANTS

Barry Boehm (USC-CSE)

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## CRITICAL ISSUES

### Issue Set I

- Ability to specify lifecycle in model
- Temporal application of Defect Removal Profiles
- Ability to handle N selectable phases of full lifecycle
- Code + Test as a single category is too large (~60% of lifecycle)
- Defect intro categories should be: Req., Design, Code, Fix
- Feedback loop from Defect Removal sub-model to Defect Introduction sub-model is needed to capture defects introduced in the process of fix other defects

### Issue Set II

- CMMI Level 4 Considerations
- Ability to refine the defect prediction throughout the lifecycle in real-time

### Issue Set III

- Rollup of modules-systems parts

### Issue Set IV

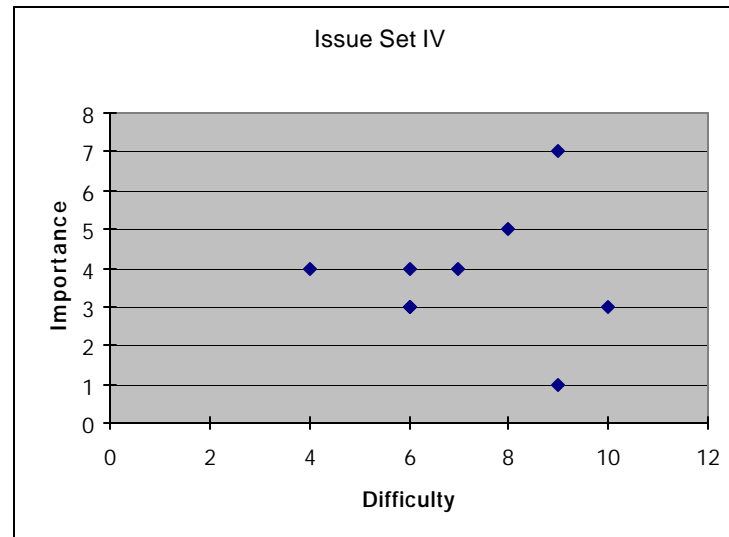
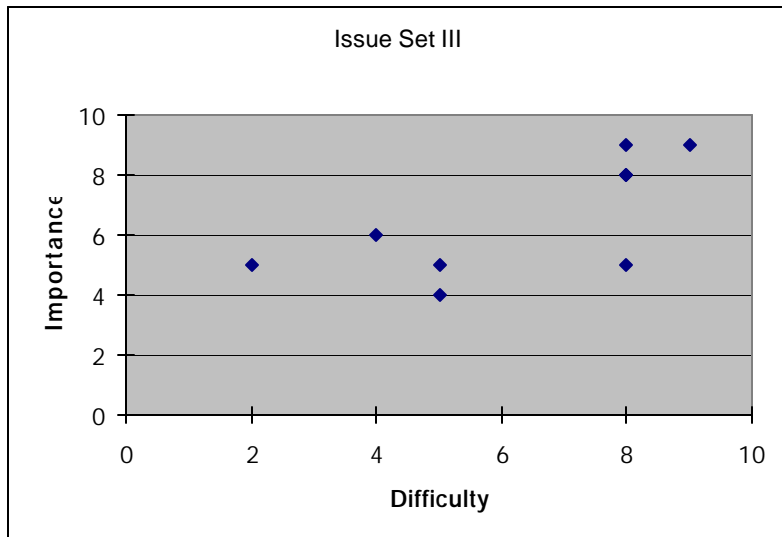
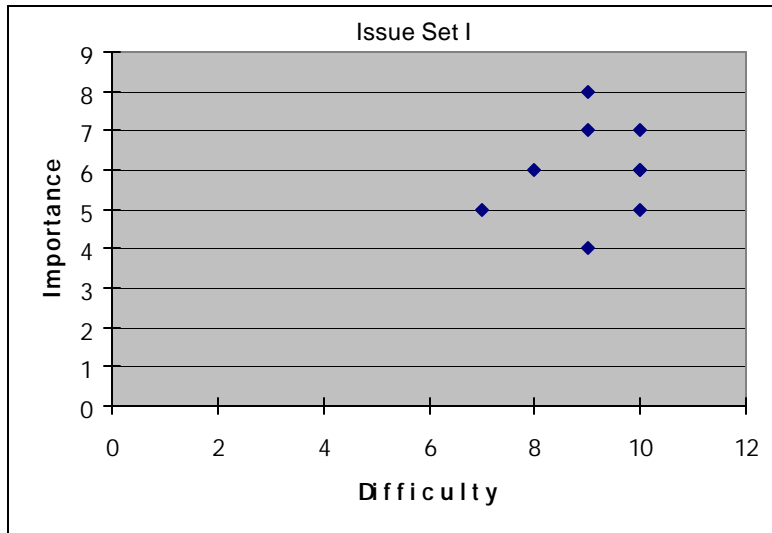
- Graphical Output

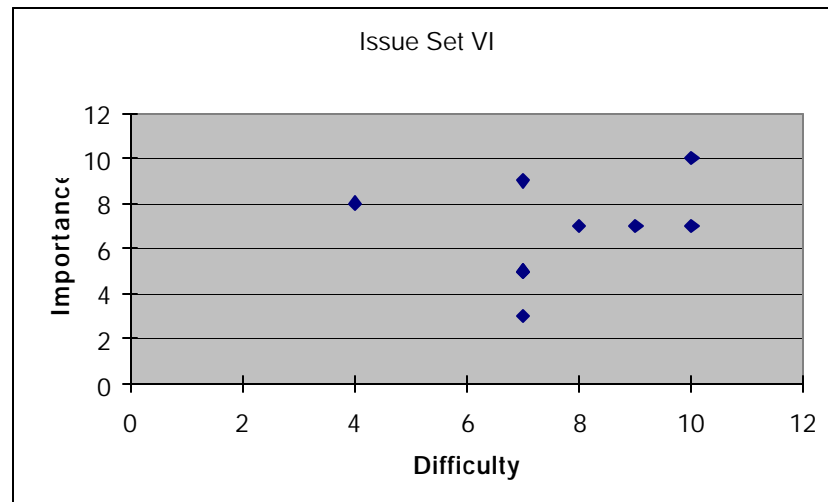
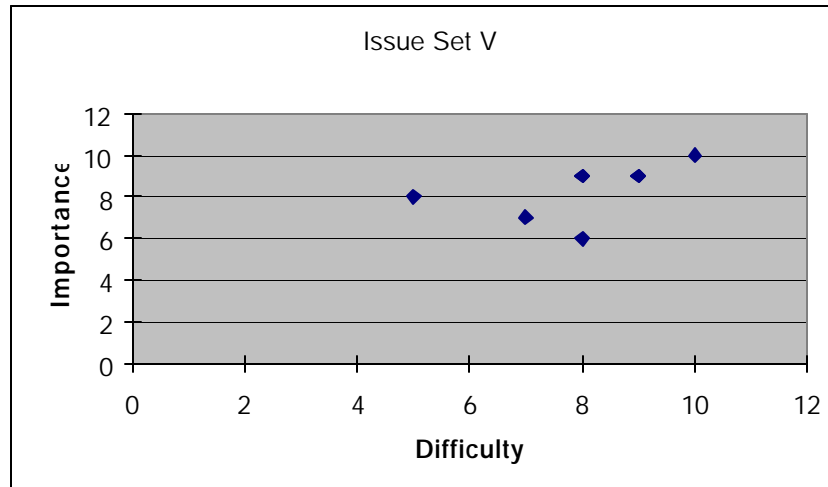
### Issue Set V

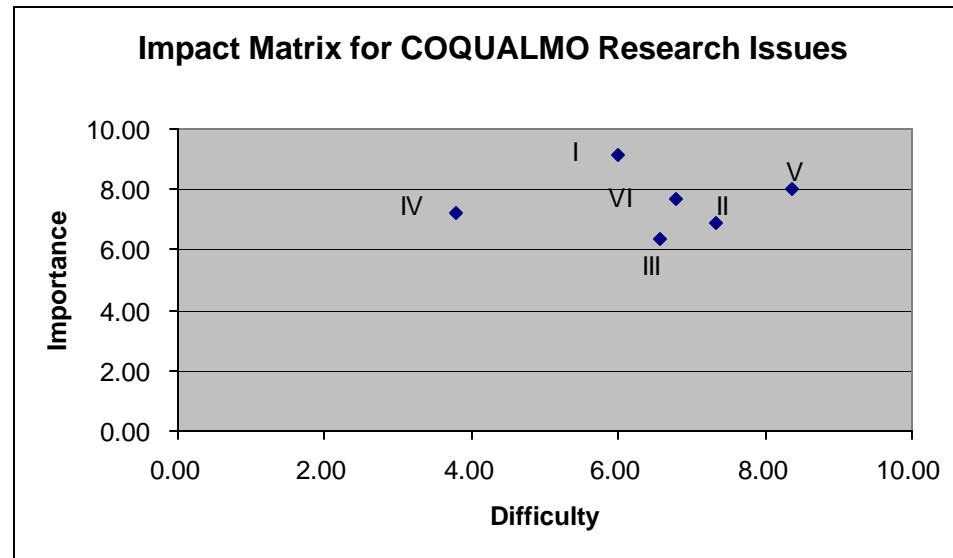
- With ODC show discovery + Removal of defects in proper phases
- Release Test – w/ODC show # + Type of defects @ release
- Definitions between IT, Aerospace, DOD, etc.
- With ODC show trigger + customer impact
- ODC can add a notion of risk to raw defect #'s
- Done Testing?
  - w/o ODC only # of defects known
  - w ODC severity judgements + # of defects known

### Issue Set VI

- Confidence intervals for predicted values









## SUGGESTIONS FOR FUTURE RESEARCH

- Delphi Iteration with industry breakout
- Language Dependencies
- Reliability – many Residual defects may never be seen