

Expert Judgement - Delphi

- (Rand Corporation 1940, Boehm 1981).
- structured group communication
- intended to solve complex problems
- iterative
- anonymous

Stages for Delphi Approach

1. Experts receive spec + estimation form
2. Discussion of product + estimation issues
3. Experts produce individual estimate
4. Estimates tabulated and returned to experts
5. Only expert's personal estimate identified
6. Experts meet to discuss results
7. Estimates are revised
8. Cycle continues until an acceptable degree of convergence is obtained

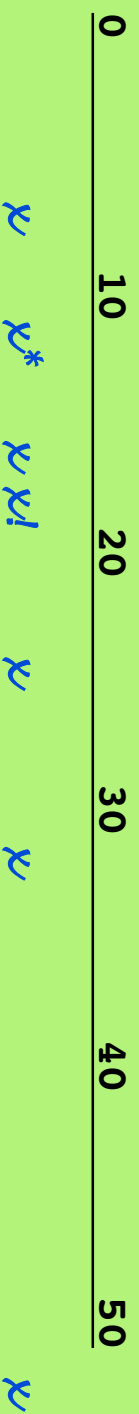
Wideband Delphi form

Project: *X134*

Date: *3/10/99*

Estimator: *MJS*

Estimation round: *1*



Key: *x* = estimate; *x** = your estimate; *x!* = median estimate

Observing Delphi Groups

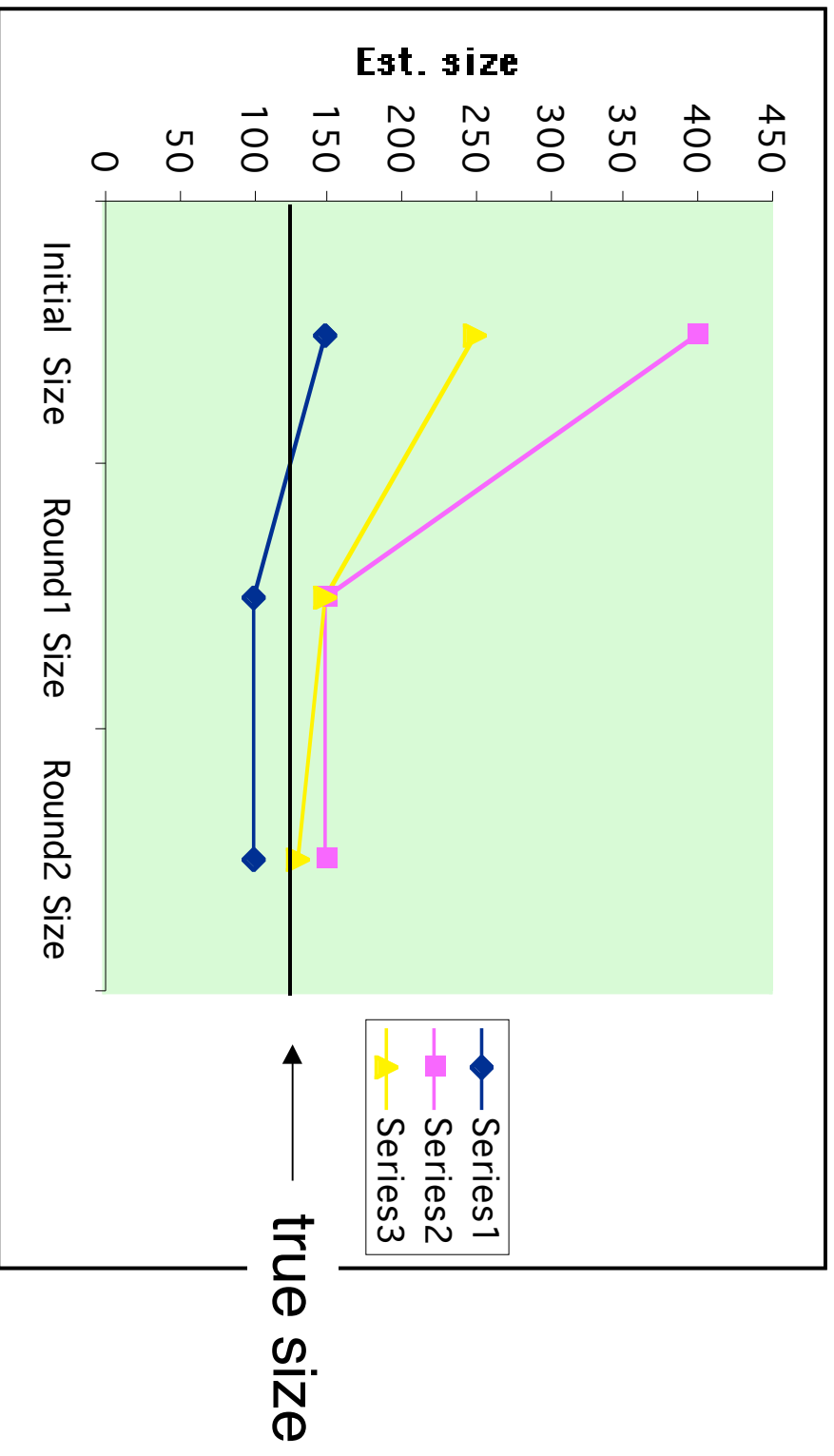
- Four groups of MSc student (replicated at UMD)
- Developing a C++ prototype for some simple scenarios
- Requested to estimate size of prototype (number of delimiters)
- Initial estimates followed by 2 group discussions
- Recorded group discussions plus scribes

Delphi size Estimation results

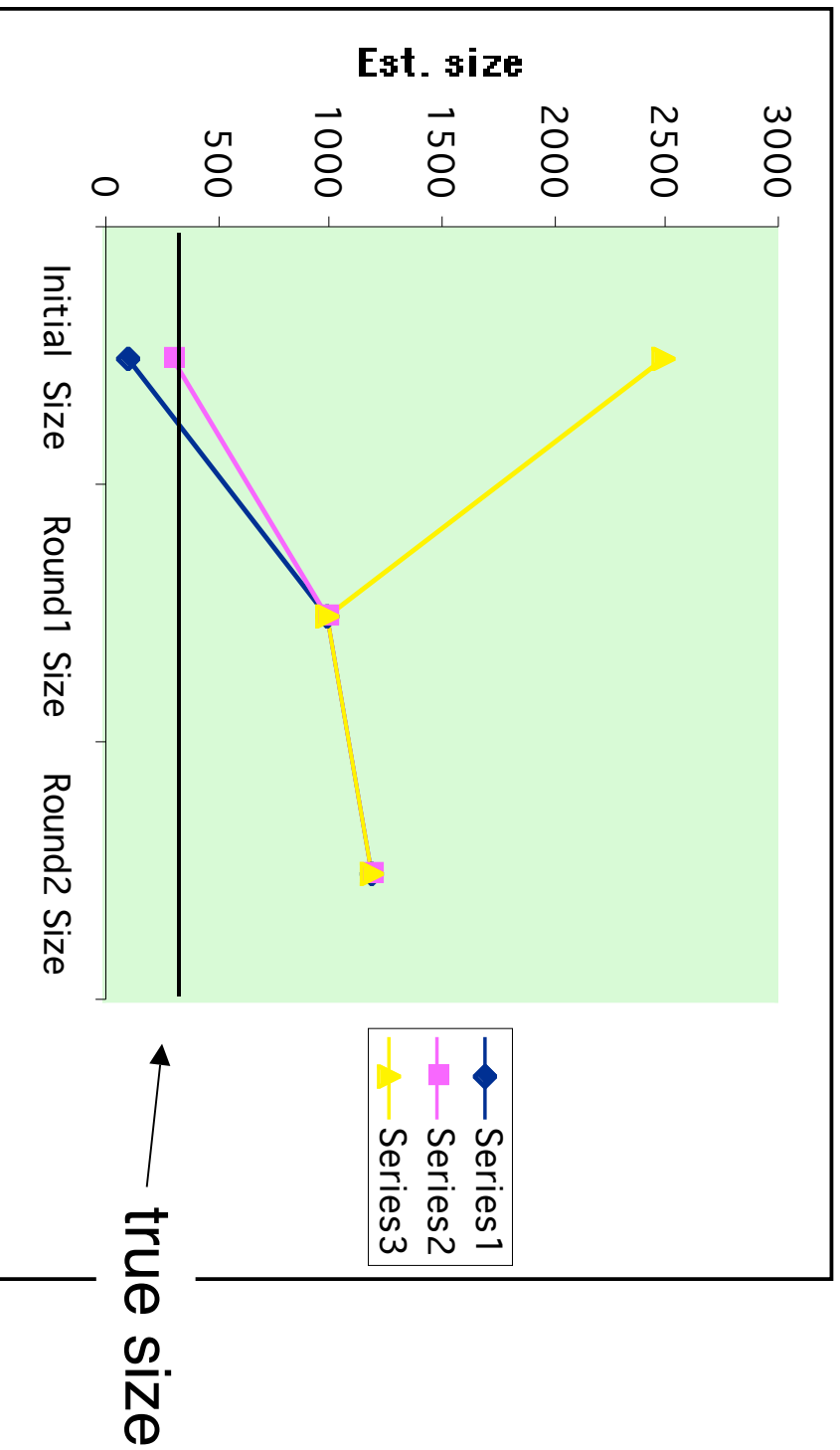
Absolute errors

Estimation	Mean	Median	Min	Max
Initial	371	160.5	23	2249
Round 1	219	40	23	749
Round 2	271	40	3	949

Converging Group



Dominant Individual



Software & IT project Management