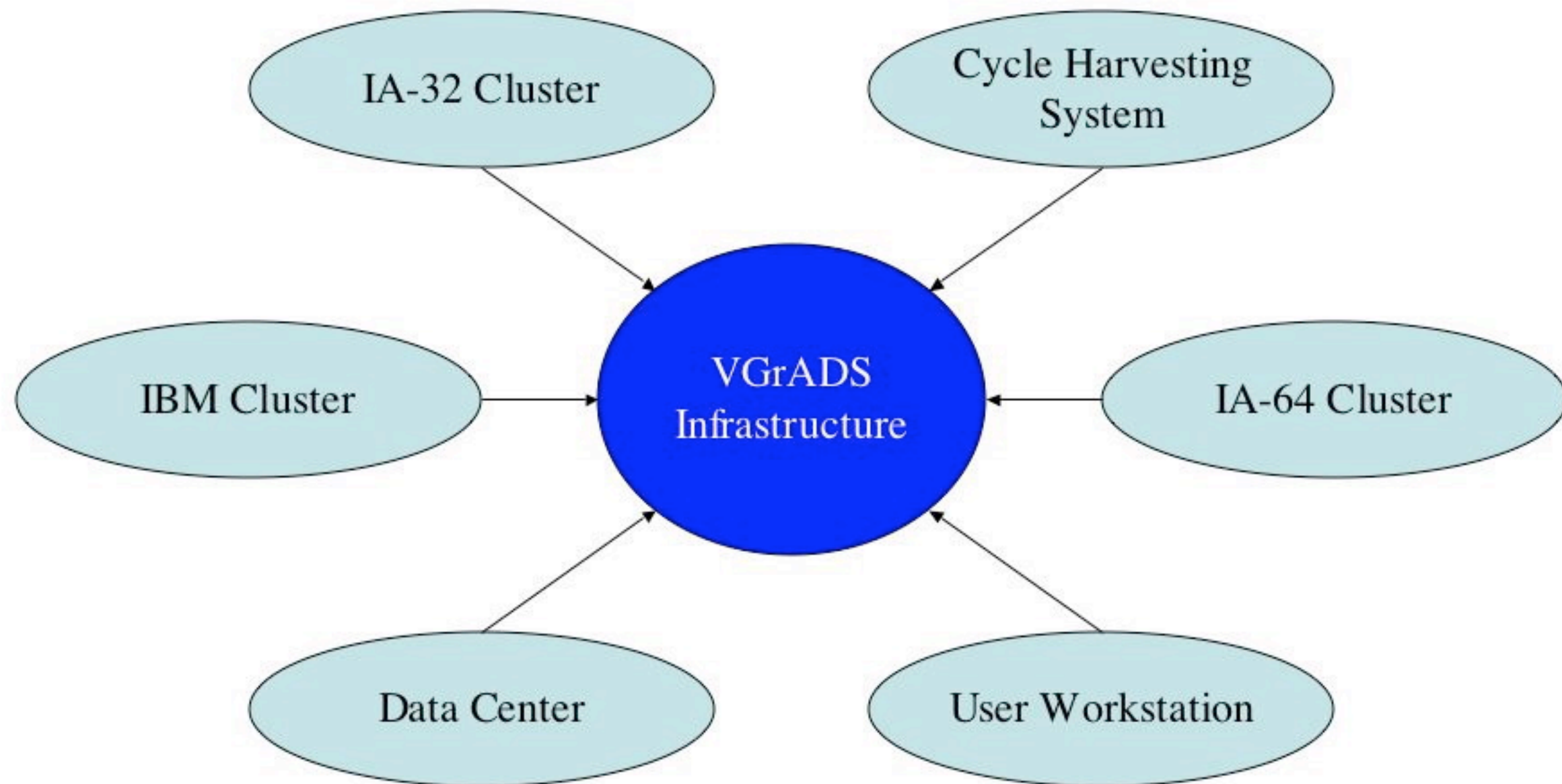
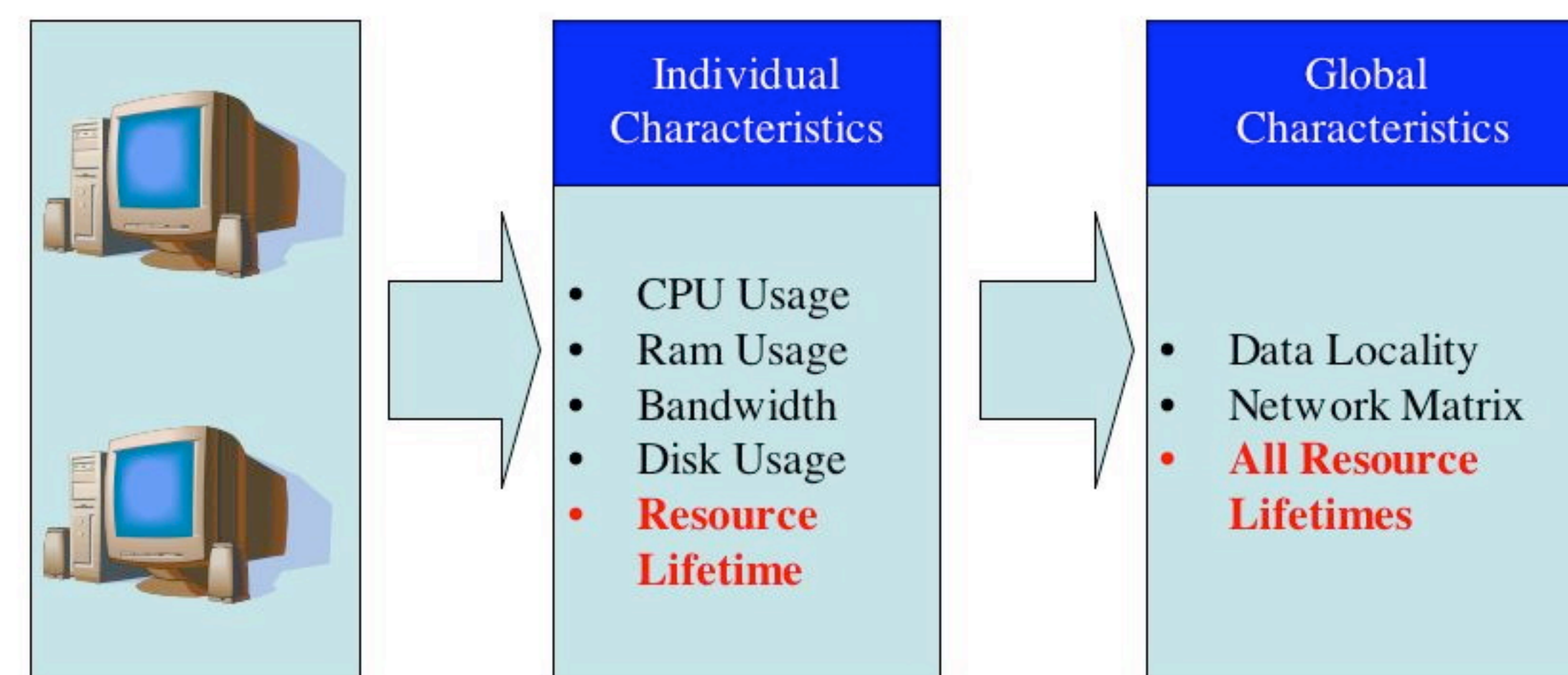


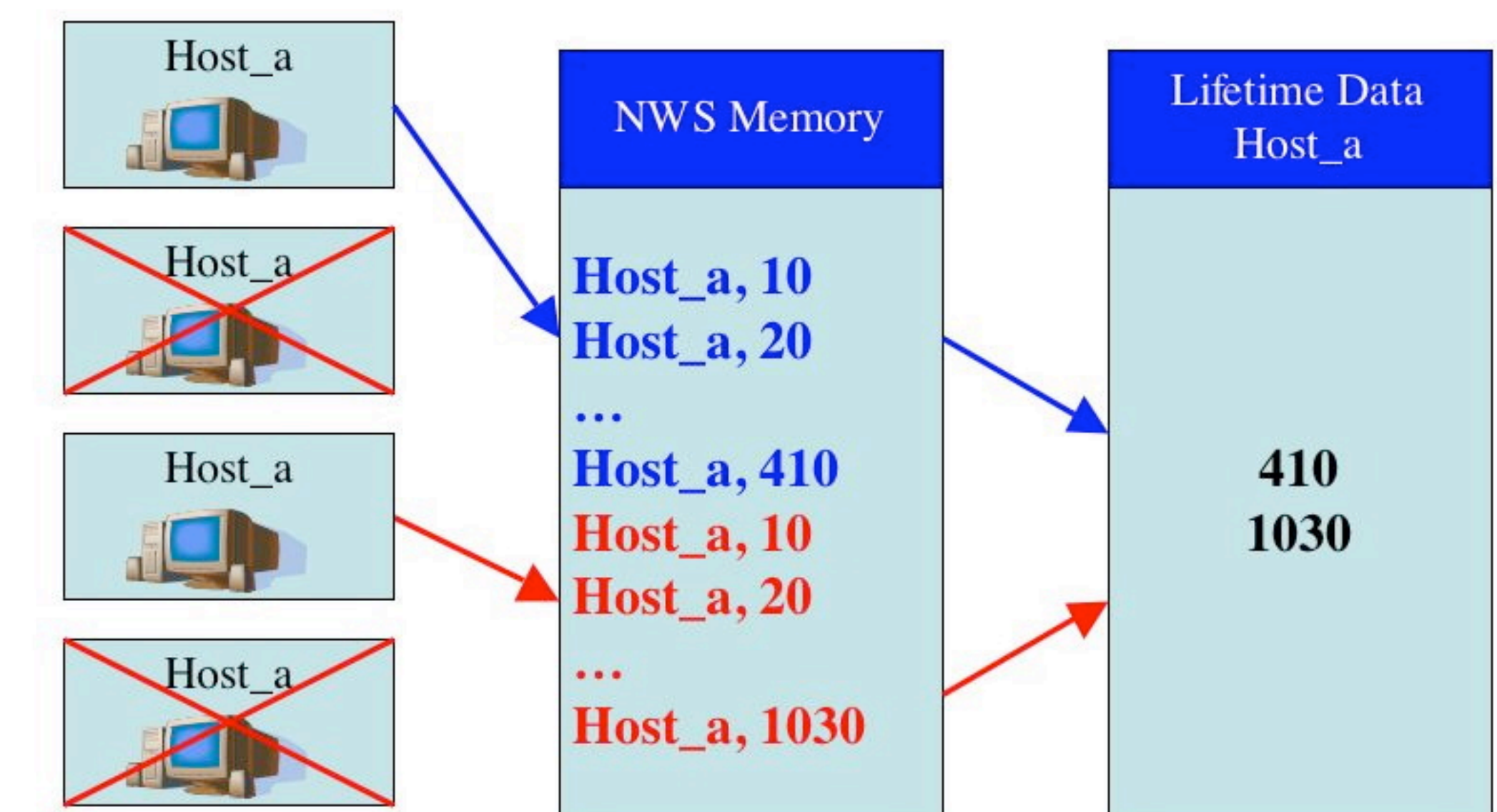
## Diverse Architecture



## Resource Characterization

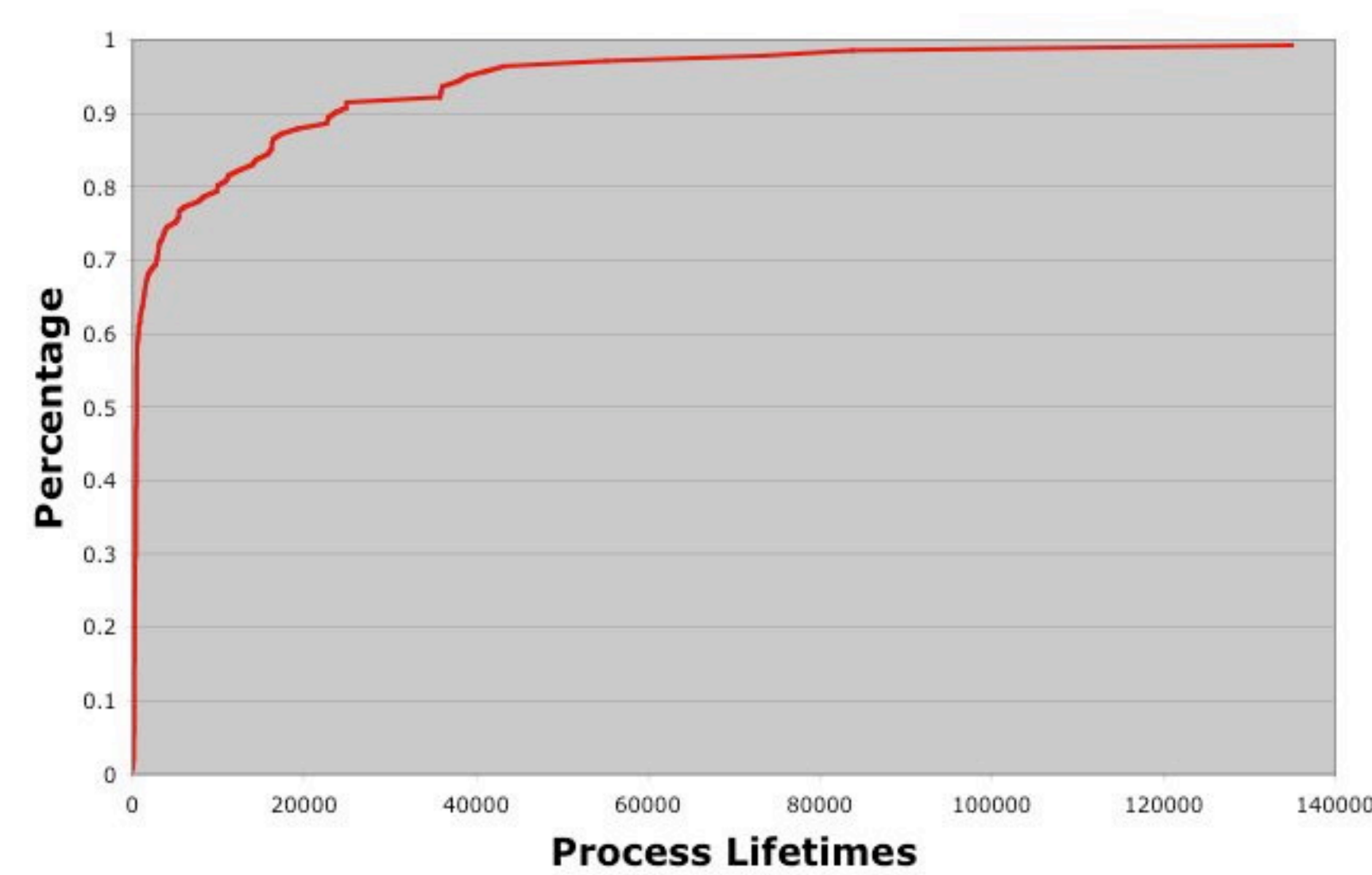


## Resource Lifetimes



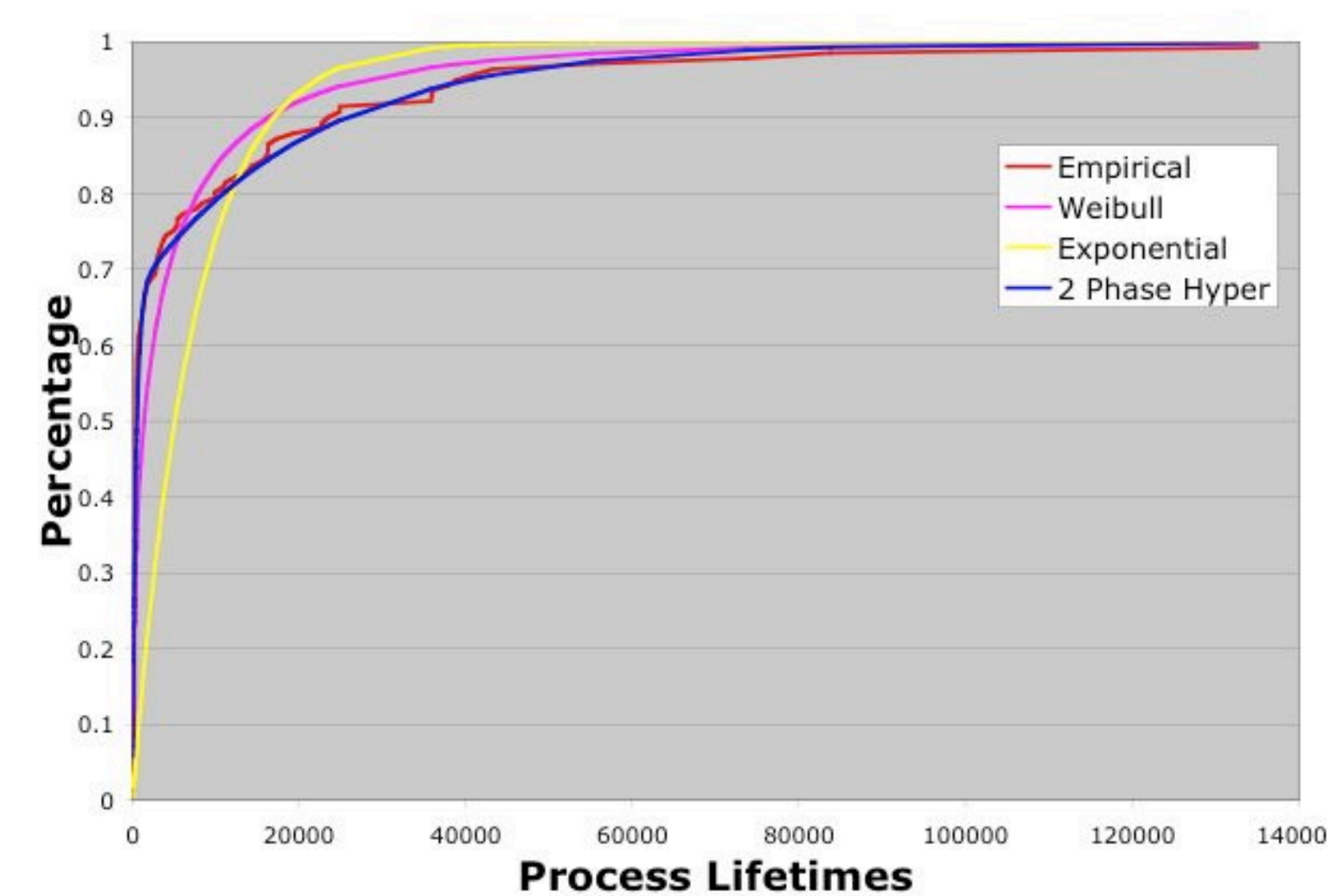
## Can we model lifetimes?

Example Condor Resource Lifetimes

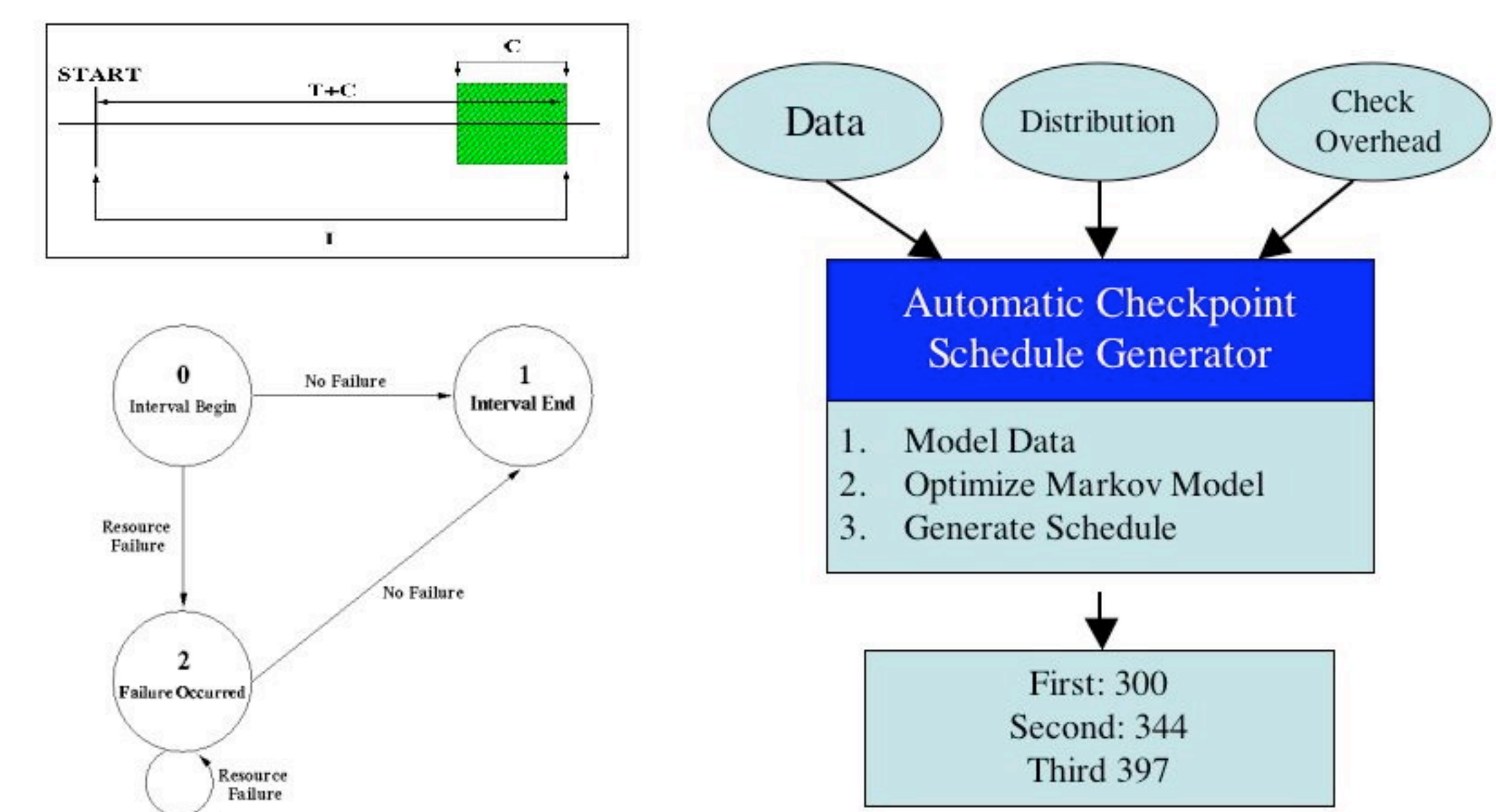


## Modeling Lifetimes

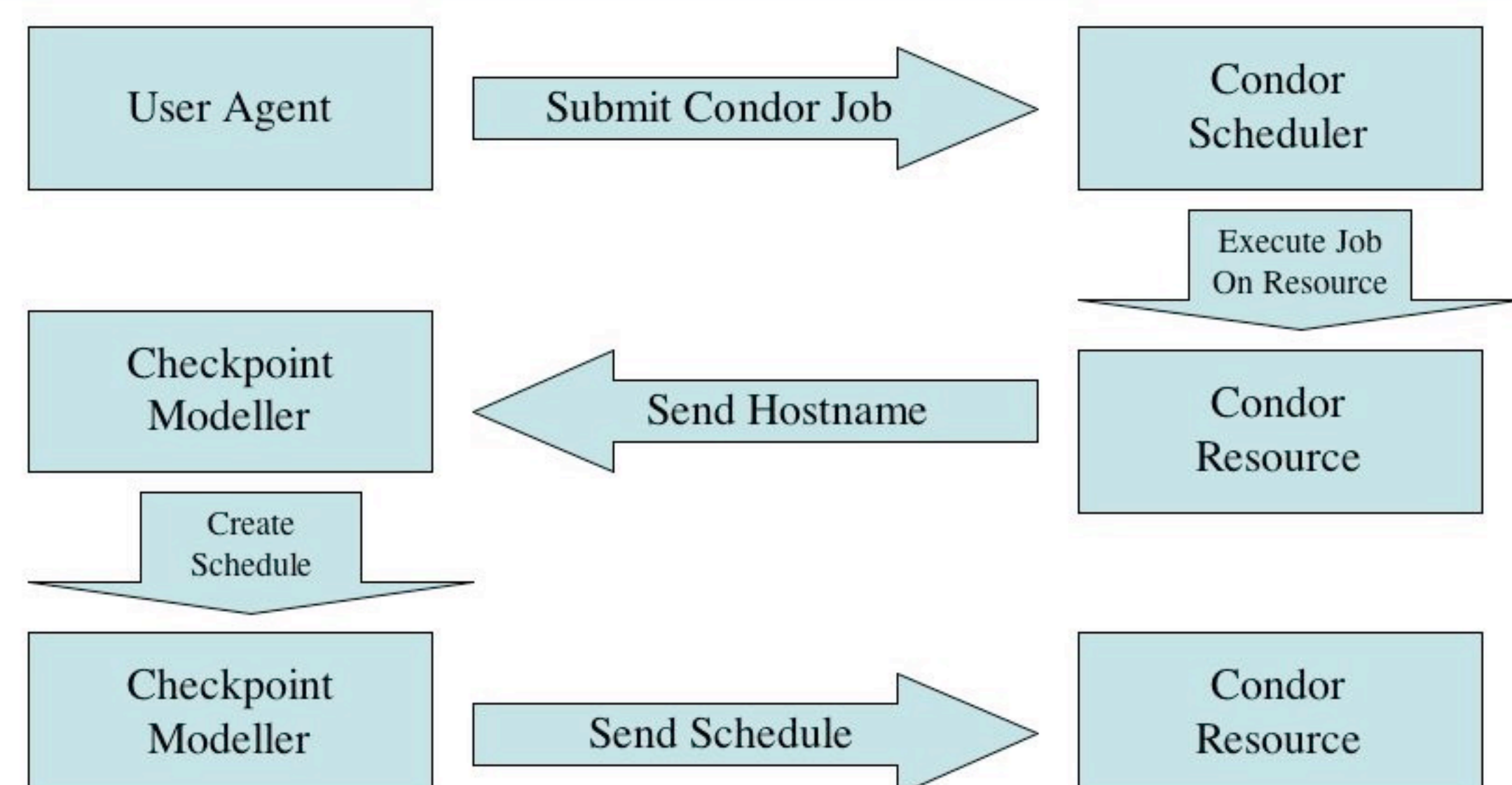
Parametric Models of Condor Lifetimes



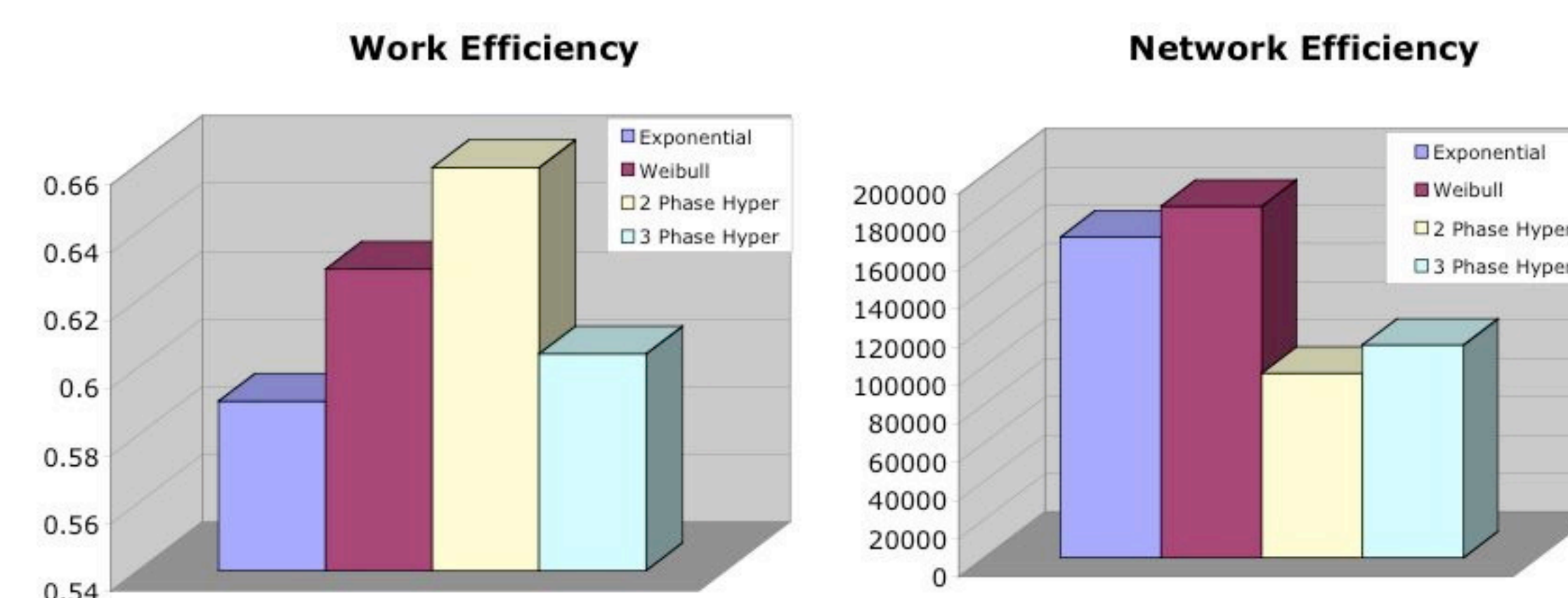
## Optimal Checkpoint Scheduling



## Experiment



## Results



## References

- K.M. Chandy and C. V. Ramamoorthy. Rollback and recovery strategies for computer programs. IEEE Trans. On Computers, 2:546-556, June 1972
- Condor Home Page - <http://www.cs.wisc.edu/condor>
- T. Head, P.M. Martin and T. D. Nguyen. The shape of failure.
- J. Plank and W. Elwasif. Experimental assessment of workstation failures and their impact on checkpointing systems. In 28th International Symposium on Fault-Tolerant Computing, pages 48-57, June 1998
- N. Vaidya. Impact of checkpoint latency on overhead ratio of a checkpointing scheme. IEEE Trans. On Computers, 46(8):942-947, August 1997
- M. Mutka and M. Livny. Profiling workstations' available capacity for remote execution. In Proceedings of Performance '87: Computer Performance Modeling, Measurement, and Evaluation, 12th IFIP WG 7.3 International Symposium, December 1987