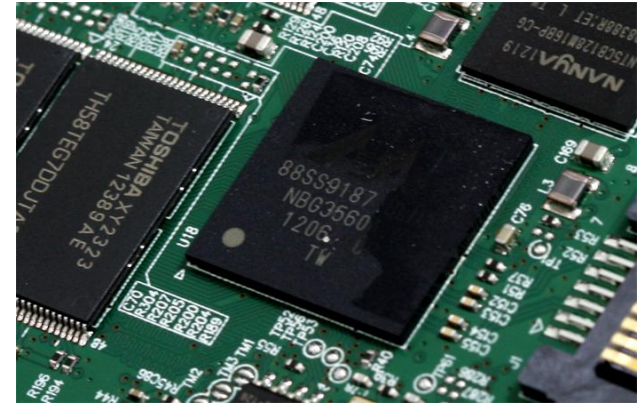


DRAM Supply Chain

Optimization of supply-chain strategy for purchase and inventory of DRAM in the server manufacturing industry.



Challenges

- Naïve purchase strategy ignored losses associated with potential supply shortages.
- No agility for changing purchase strategy in the face of changing DRAM prices.
- Analyst estimated several weeks for analysis in Excel, without including supply-shock effects.
- Analyst was making arbitrary choices of which data and statistical model to use in his analysis.

Provisdom's Solution

- Required only 1 week for complete analysis, including several extensions of the original problem (e.g., including uncertainty for DRAM utilization).
- Decreased seven-week cost of shortages and buying and storing DRAM in terms of shareholder value by 35%.
- Included all information deemed relevant by the client, such as possibility of supply shocks.
- Proper utilization of all available DRAM price data.

Results

- Seven-week shareholder value for DRAM purchase and usage **increased from -\$1.77 million to -\$1.15 million.**
- Time required: **1 week + 2 hours of client time.**