

Optimization mistakes that can kill trading strategy performance

Bob Pardo from Pardo Capital shares optimization mistakes that impact traders

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Introduction



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#1 - Analysis of optimization runs

- Overall % of profitable optimizations is low
- Majority of optimization results should be profitable
- Optimization results should be evenly distributed
- Optimization results are relatively interchangeable –
 - would you be comfortable with the least profitable as well as the most profitable?
- Prefer a small range of profits rather than large variations
- Lower profitability runs are at the outskirts of the optimization space



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#2 - Targeted optimization

- Optimizing to reduce a specific losing period
- Relying on one extremely profitable period



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#2 - Targeted optimization

“You’re much better off with a robust system with a large drawdown than a system with a small drawdown that is not going to perform at all.”

#3 - Step size and parameters

- Small step sizes can lead to curve-fitting
- Want stable optimization results for all steps - peaks in results can be dangerous
- Some parameters may not be suitable for optimization at all
- Optimizing stop loss and target size can lead to over-fitting/cherry picking
- Does the parameter change impact a small number of trades or a large number of trades?



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#3 - Step size and parameters

*“If your optimizations are really only knocking out one or two big losers,
or picking one or two really big winners...
that’s very, very dangerous.”*

Summary

- % of optimization runs that are profitable
- Optimization targeting a specific drawdown or profitable move
- Size of optimization steps and parameters suitable for optimization



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