# Summary of experiences

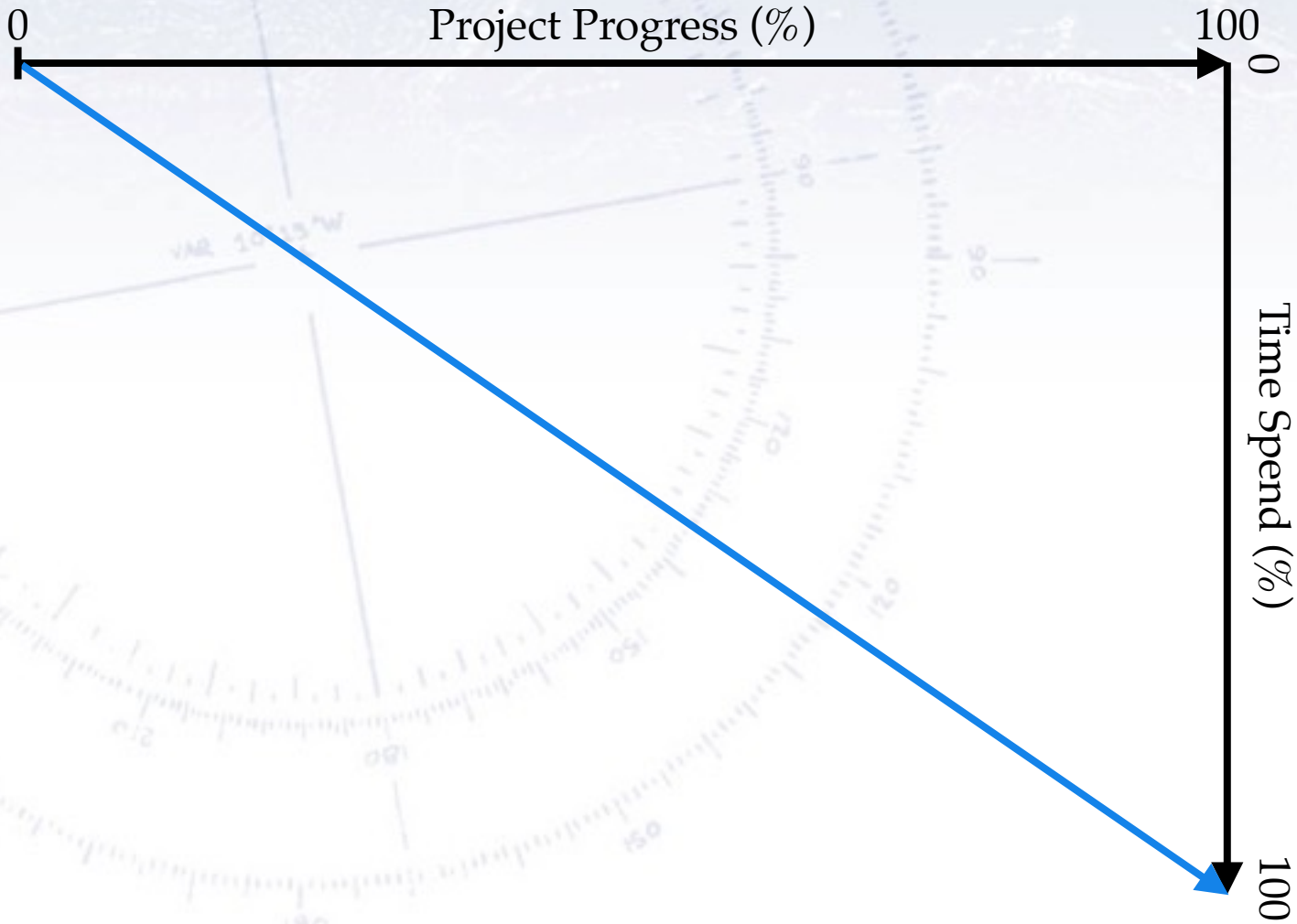
During the final presentations, a summary of experiences were:

- Start with a quick-and-dirty method and get it to work. Then refine it.
- Pre-processing is very important. So is data inspection - plot features.
  - ✓ Use e.g. quantile transformation to make distributions "nice".
  - ✓ Check if data is unbalanced, sparse, or otherwise needs re-weighting.
- Speed / Computing power is important.
  - ✓ Parallel computing is good. GPUs are great. Starting small is fast/optimal.
- HyperParameter (HP) optimisation is cumbersome.
  - ✓ Specifying HPs is nice: Both for reproducibility and as a help to others!
- Diversity in ML "phase space" is immense and overwhelming.
  - ✓ Adam, CNN, RNN, DNN, pDNN, GNN, ??NN, One-Hot encoding, etc.
  - ✓ Manage to navigate in this jungle and find "any" good solutions.

Generally, everybody felt, that they could actually get ML to work and solve problems with it. We hope that this will be your impression too.

# Own project experience

Imagine that you are doing a project in a certain time… quite realistic!
You might think this (in blue) is the way…



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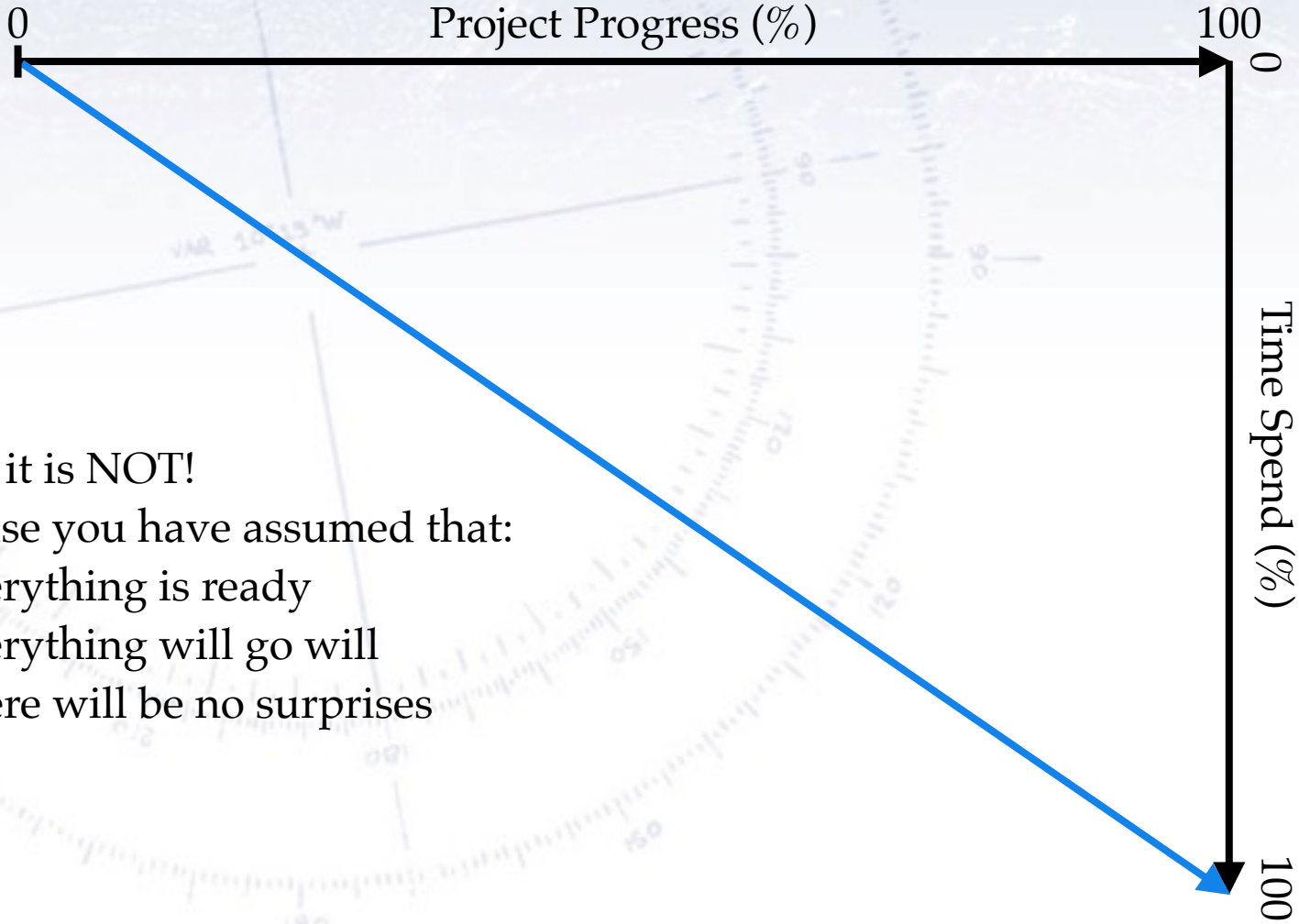


…but it is NOT!
Because you have assumed that:

- Everything is ready
- Everything will go will
- There will be no surprises

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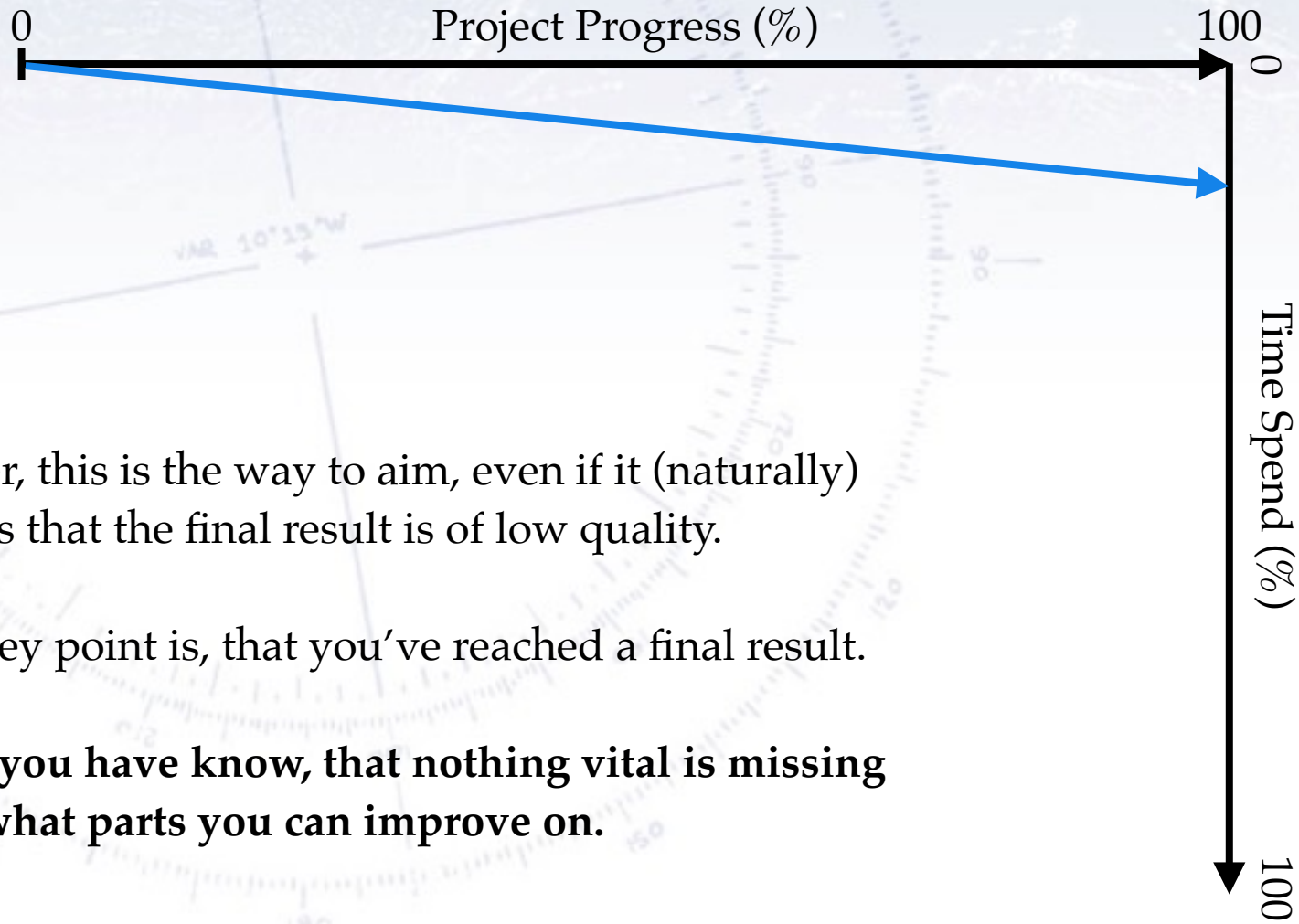


Rather, this is the way to aim, even if it (naturally) means that the final result is of low quality.

The key point is, that you've reached a final result.

**Now you have know, that nothing vital is missing and what parts you can improve on.**

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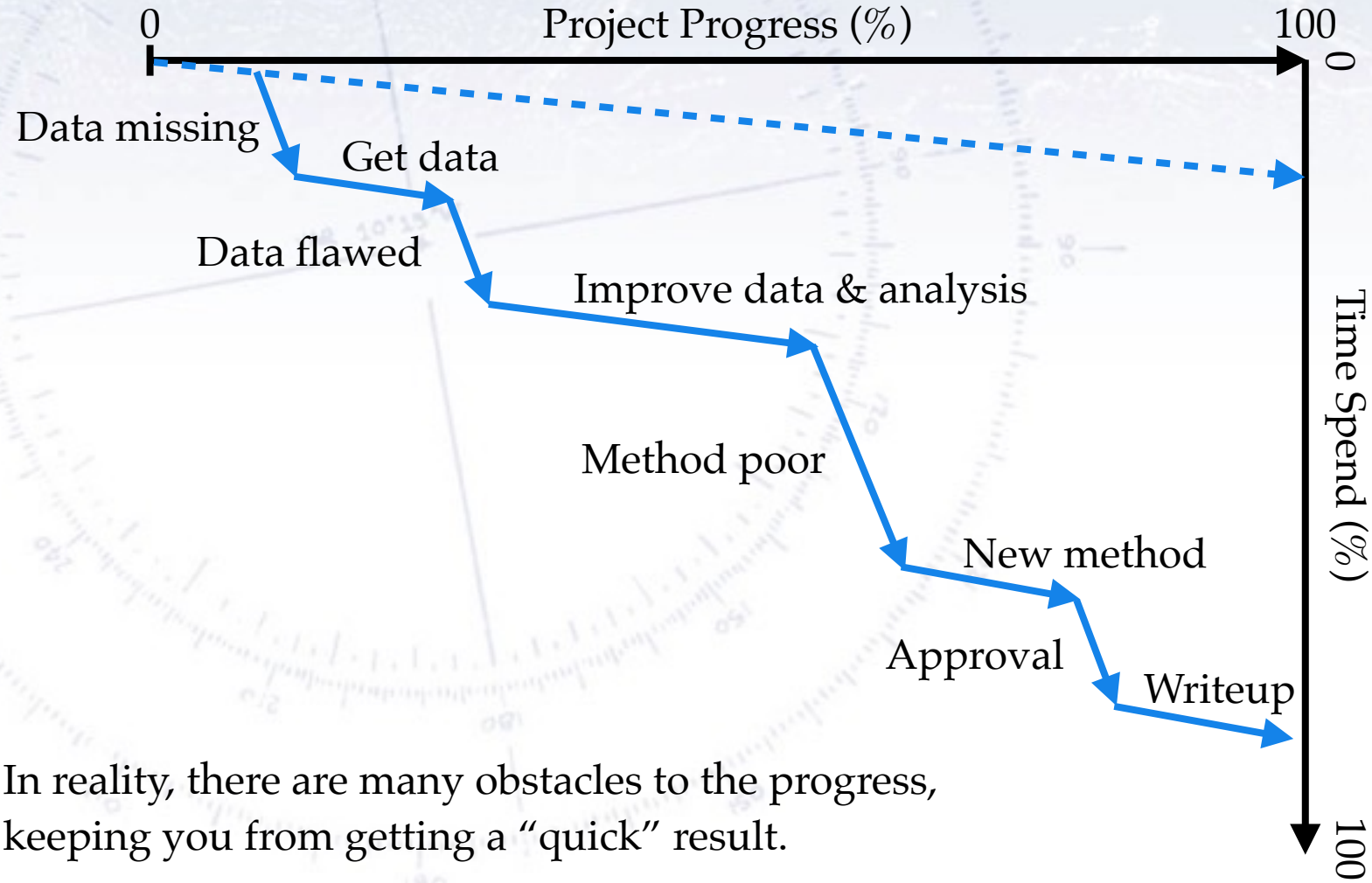


In reality, there are many obstacles to the progress,
keeping you from getting a “quick” result.

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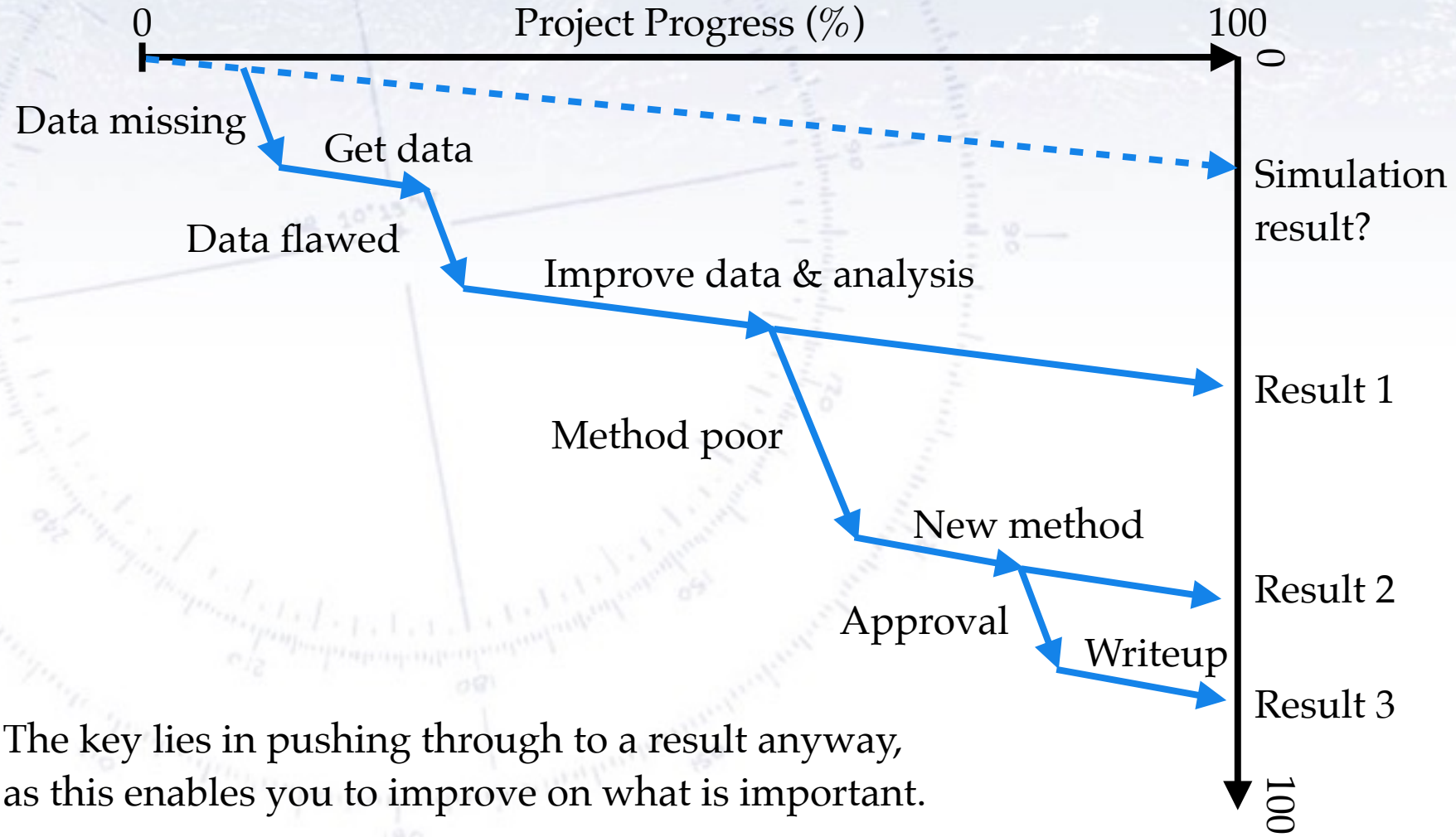


The key lies in pushing through to a result anyway,
as this enables you to improve on what is important.