If the problem you're tackling has significant Academic literature, that covers the gotchas, then go w/ that

Error Analysis

Build your first system quickly, then iterate

deeplearning.ai

Speech recognition example

- Noisy background
  - Café noise
  - Car noise
- Accent
- Far from mic
- Young
- Stutter
- ...

Guideline:
Build your first system quickly, then iterate

- Set up dev/test set and metric
- Build initial system quickly
- Use Bias/Variance analysis & Error analysis to prioritize next steps.

Handwritten annotations:

Many features to go after, which one to prioritize?

Ways to counter

Ways to Account for

Far from mic

Ways to produce correct transcript even if speaker says uh, ah... ummm...

↓ Actionable bias v/s Variance

100 examples (capture trends)

If many Recognition are failing because mic is far away, then work on prioritizing that

Andrew Ng