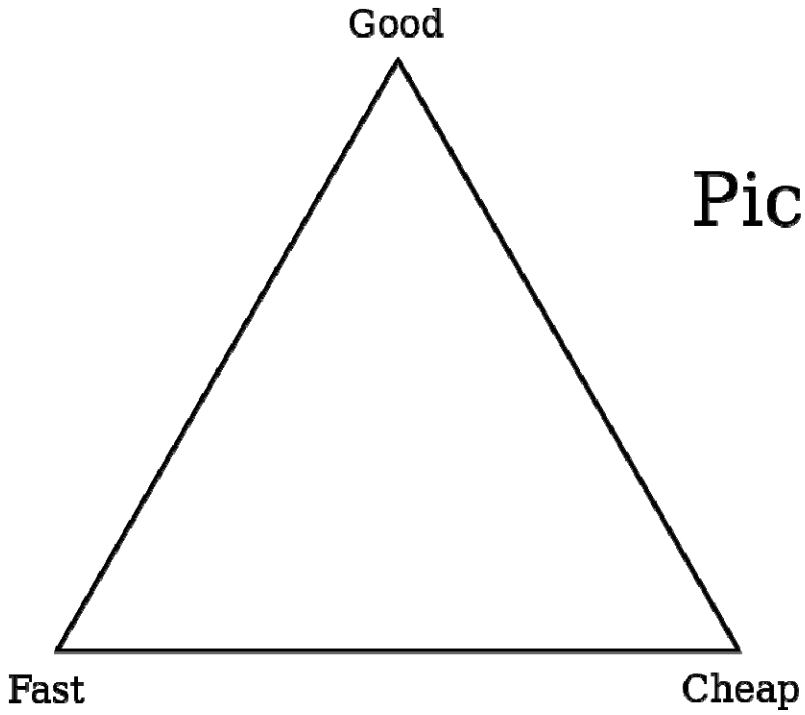
Project management concerns

- Time ?
- Cost ?
- Quality ?



Pick any Two

Verification versus Validation

Did you build the product right ? "Verification"

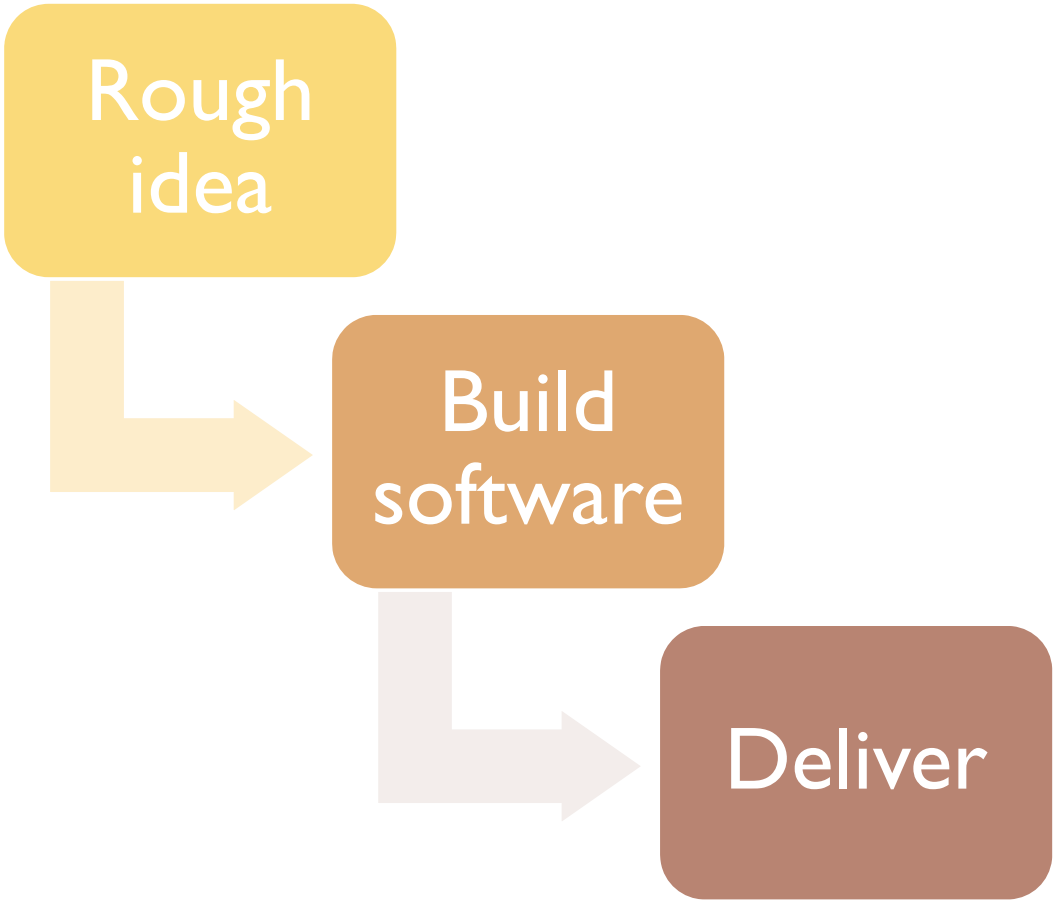
Specification

Did you build the right product ? "Validation"

Value

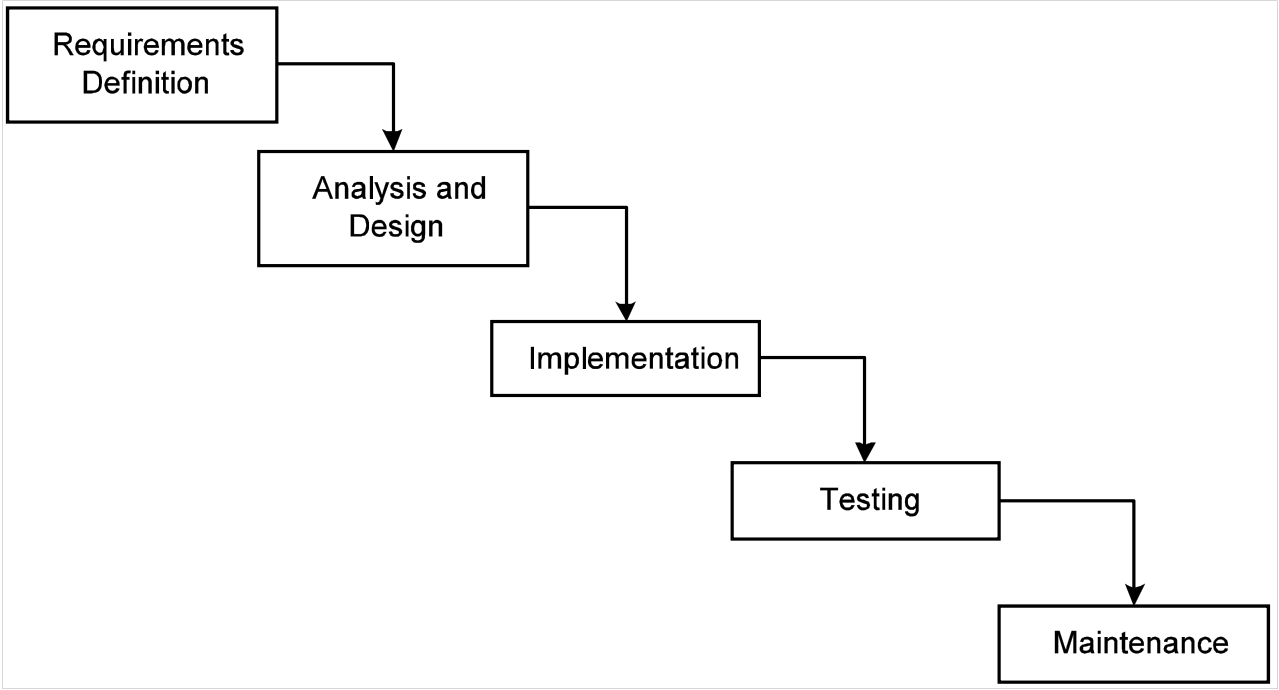
- Value is only realised when working software is put into the hands of a customer which solves a problem that they have.

Big Bang Development



The Waterfall Model of Software Development

The Waterfall Software Development Lifecycle (SDLC)

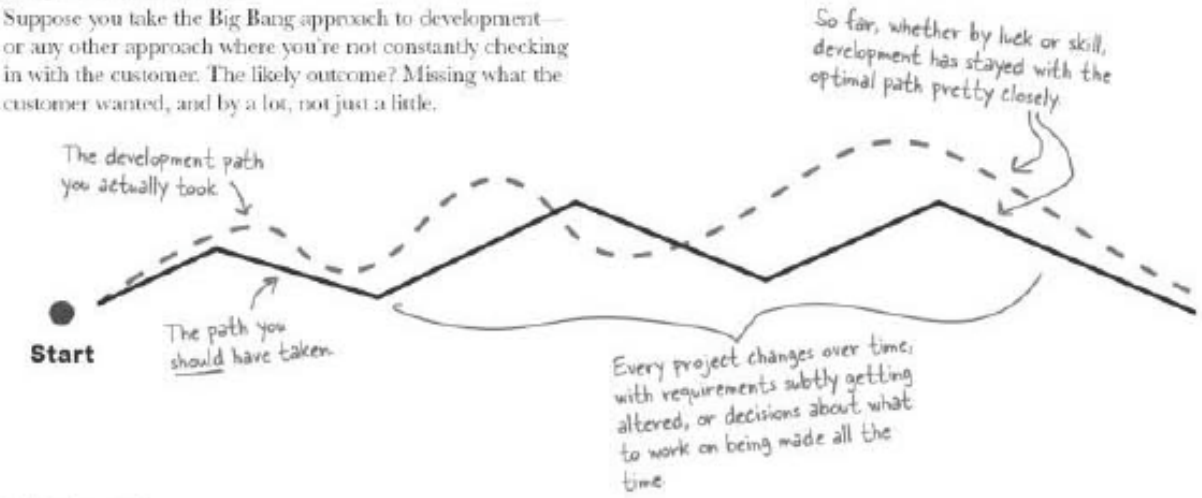


Software development isn't guesswork

- Waterfall and big bang development has no feedback.
- Developers tend to make many assumptions as they go.
- Iterative development provides a means getting **regular feedback.**

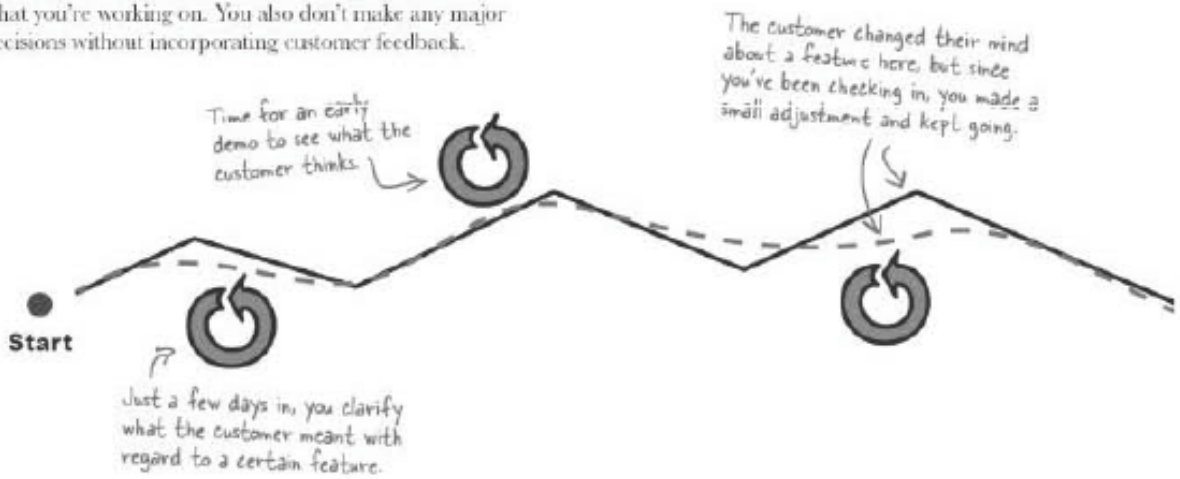
Without iteration...

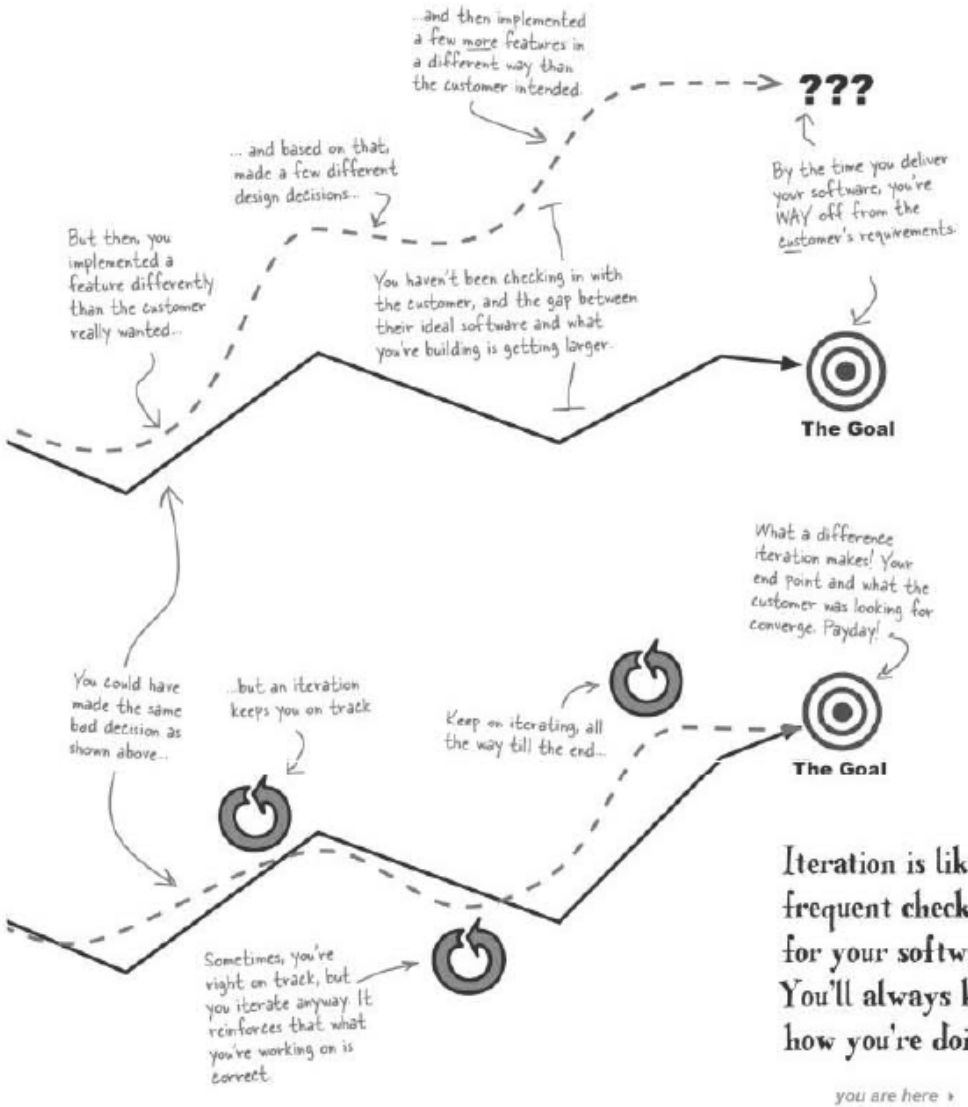
Suppose you take the Big Bang approach to development—or any other approach where you're not constantly checking in with the customer. The likely outcome? Missing what the customer wanted, and by a lot, not just a little.



With iteration...

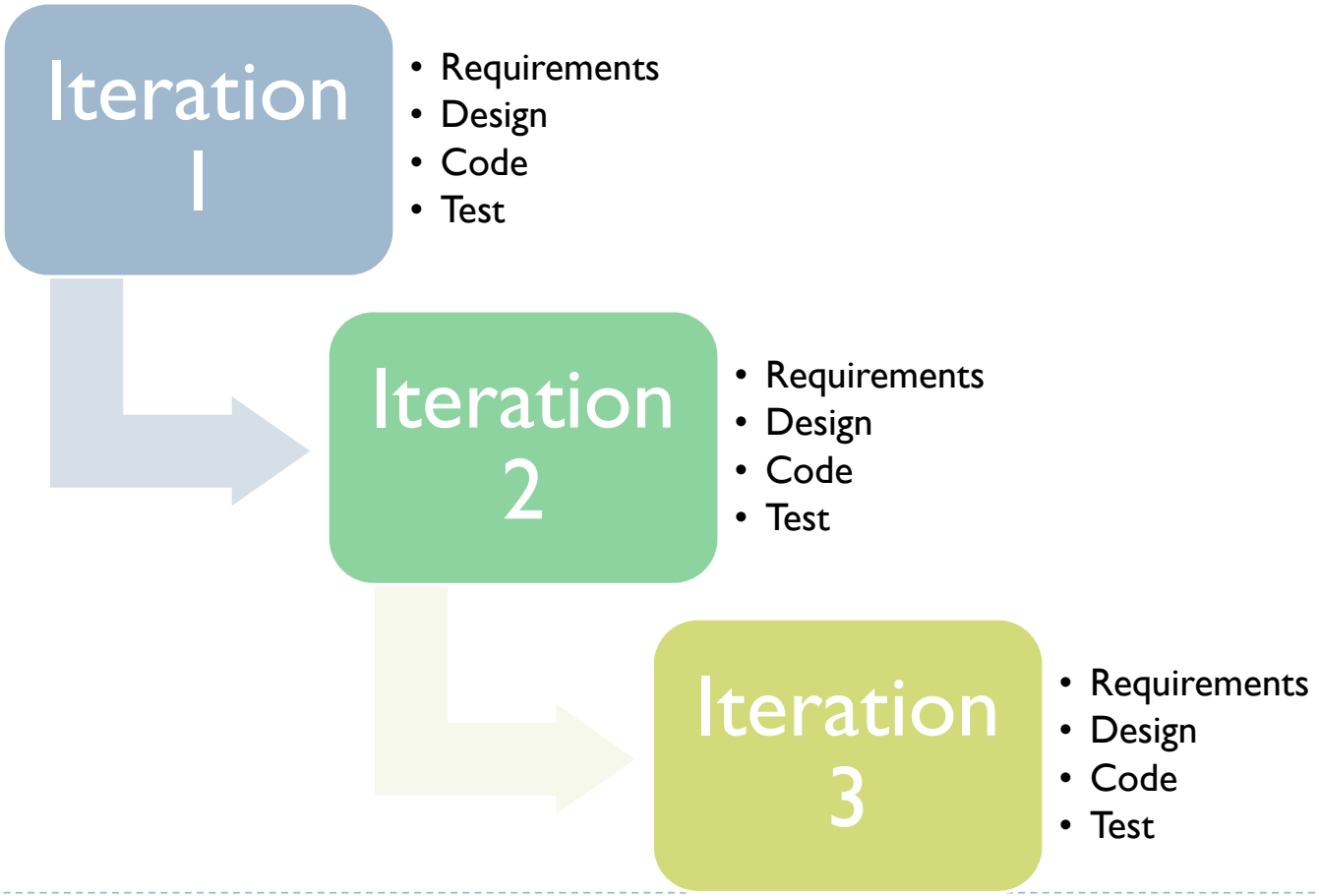
This time, you decide that every time you make significant progress you'll check with the customer and refine what you're working on. You also don't make any major decisions without incorporating customer feedback.

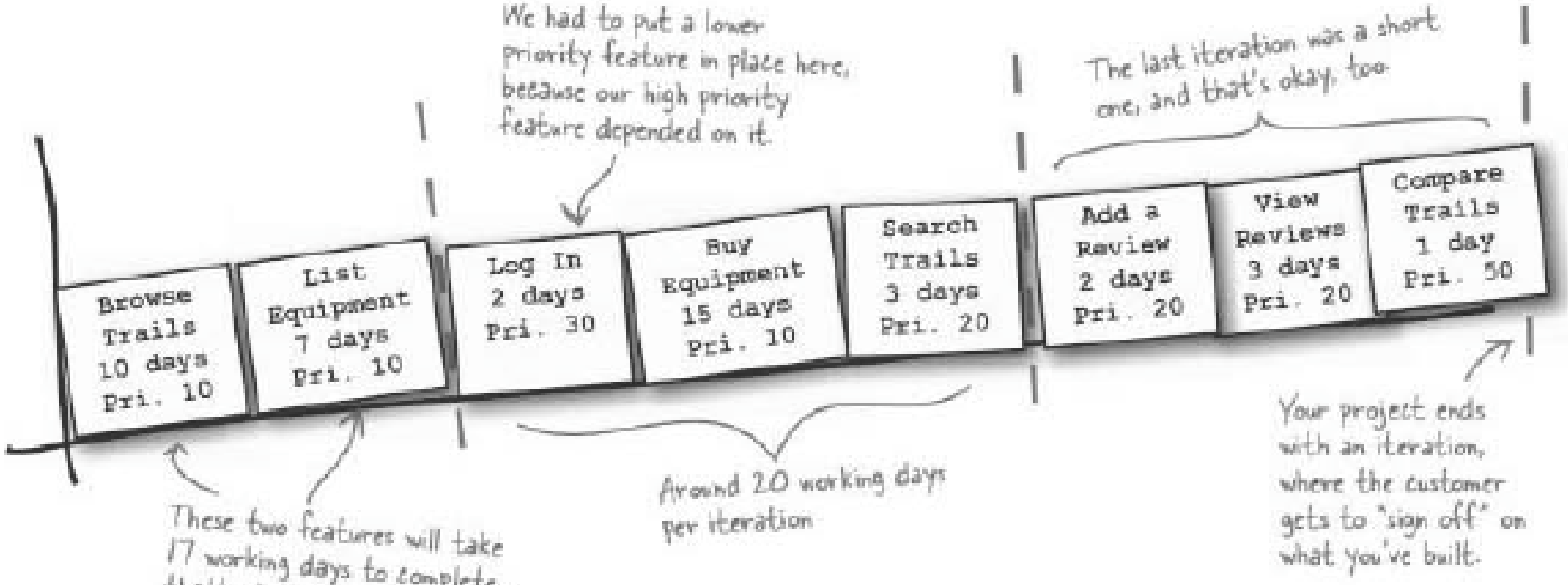




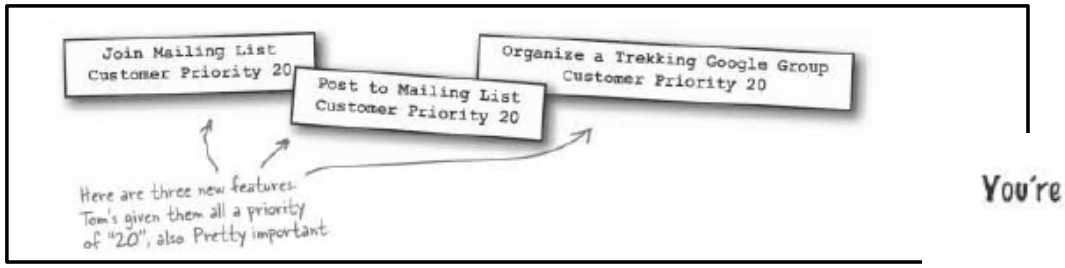
Iteration is like a frequent checkup for your software. You'll always know how you're doing.

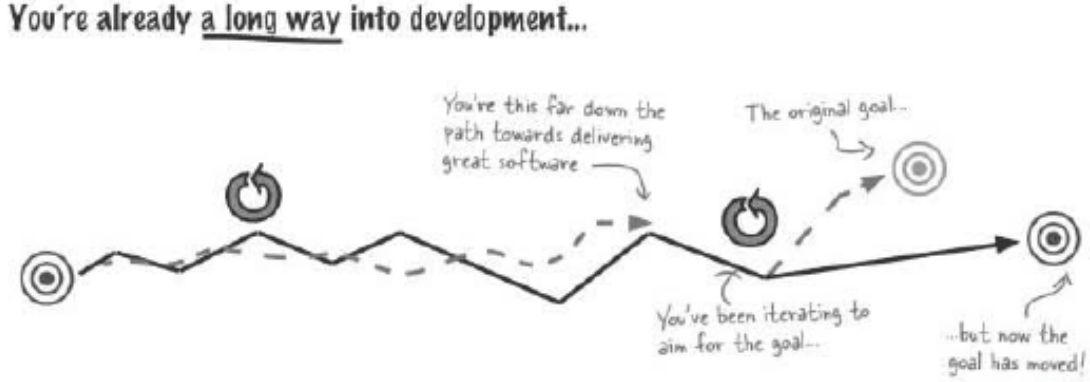
Each iteration is a mini project

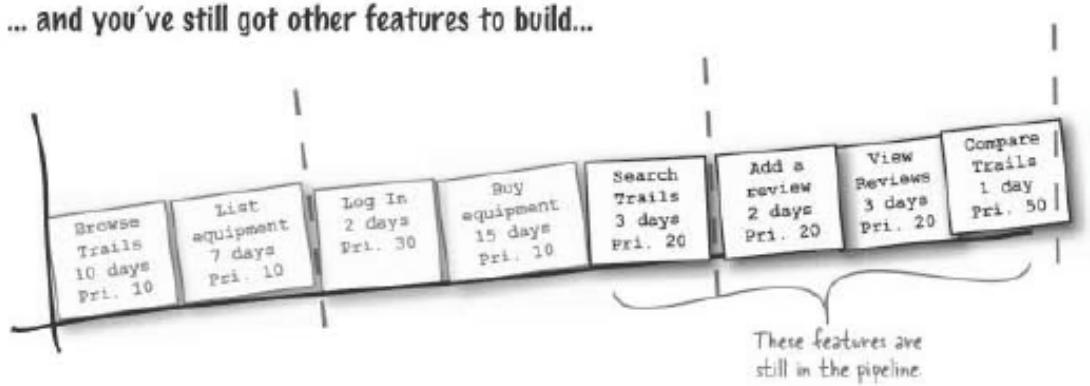



We had to put a lower priority feature in place here, because our high priority feature depended on it.
The last iteration was a short one, and that's okay, too.
Browse Trails 10 days Pri. 10
List Equipment 7 days Pri. 10
Log In 2 days Pri. 30
Buy Equipment 15 days Pri. 10
Search Trails 3 days Pri. 20
Add a Review 2 days Pri. 20
View Reviews 3 days Pri. 20
Compare Trails 1 day Pri. 50
These two features will take 17 working days to complete... that's close to a calendar month, so we iterate when we're done here.
Around 20 working days per iteration
Your project ends with an iteration, where the customer gets to "sign off" on what you've built.

Customer changes requirements

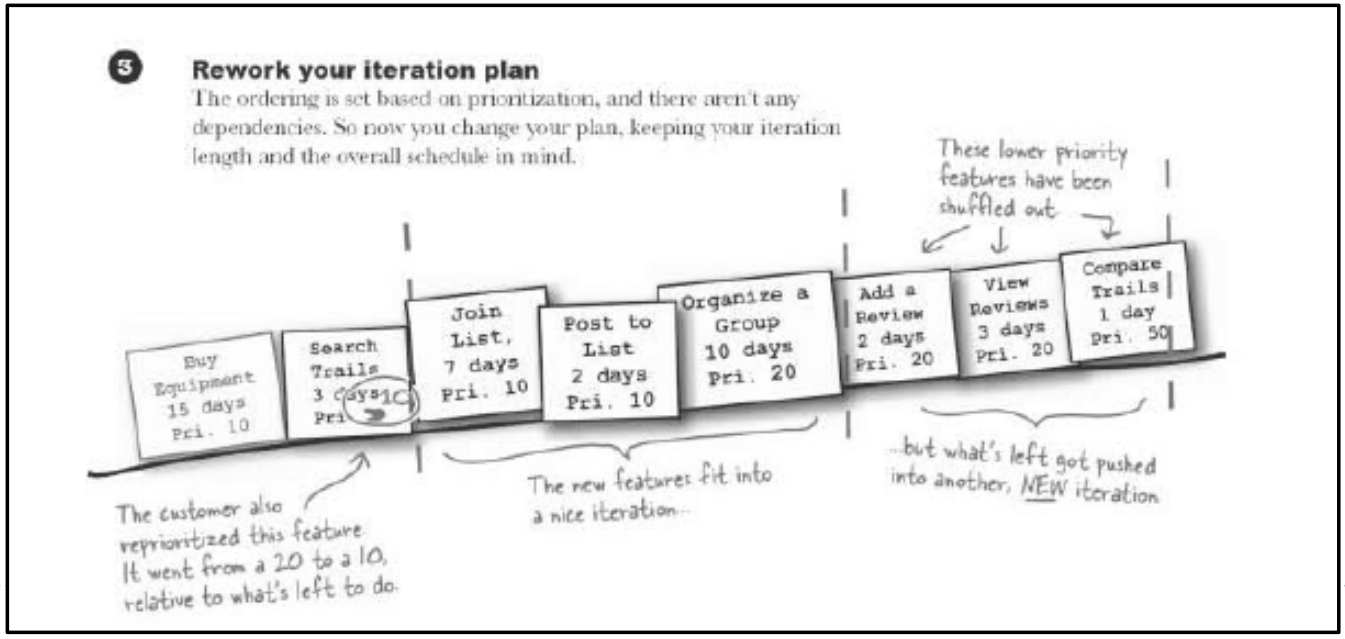






Dealing with change

- Estimate new features
- Prioritise new features
- Replan
  - Many teams freeze scope for an iteration



Summary

- Project management concerns/concepts

- Three different SDLC's
  - Big Bang
  - Waterfall
  - Iterative