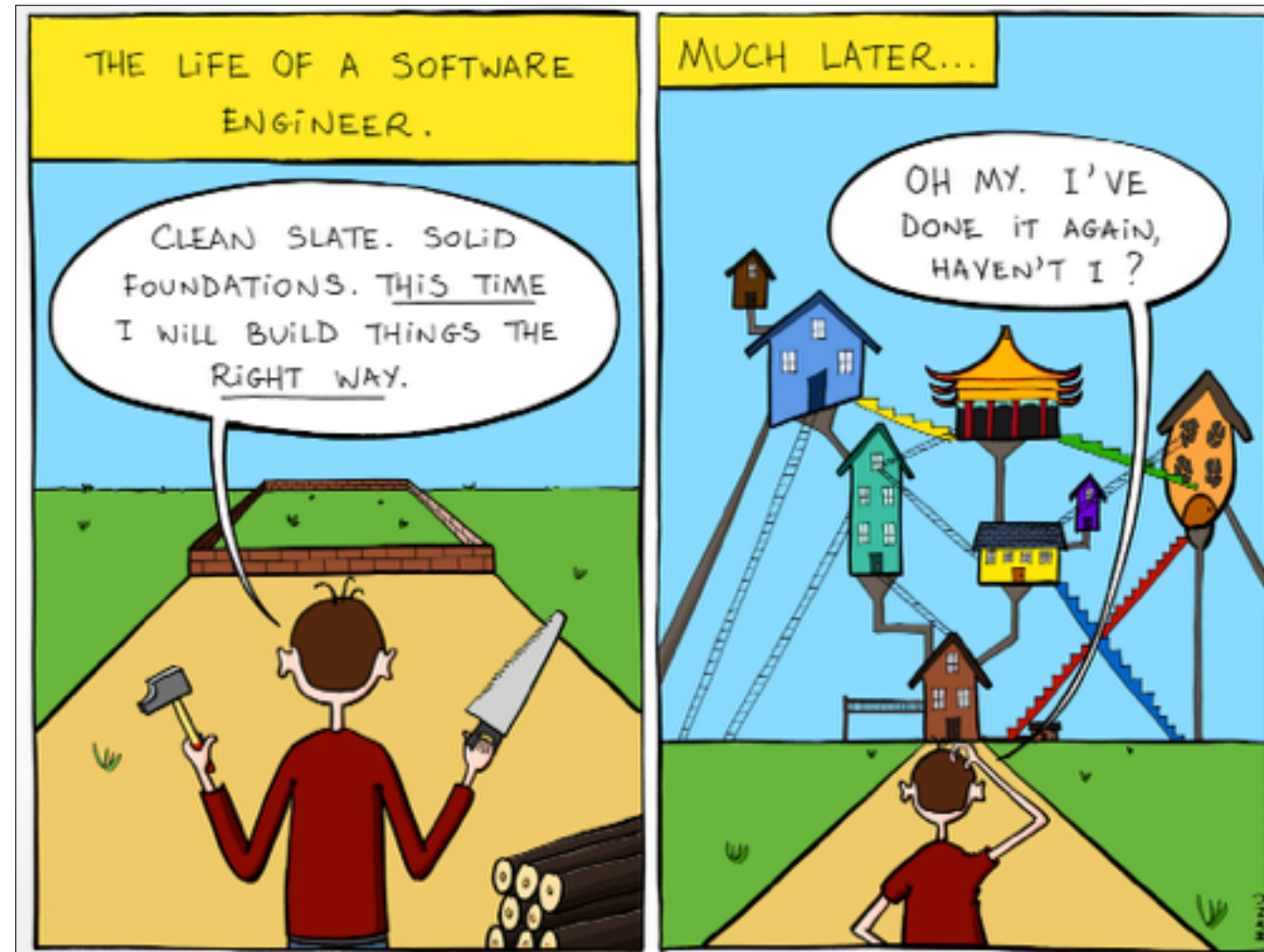


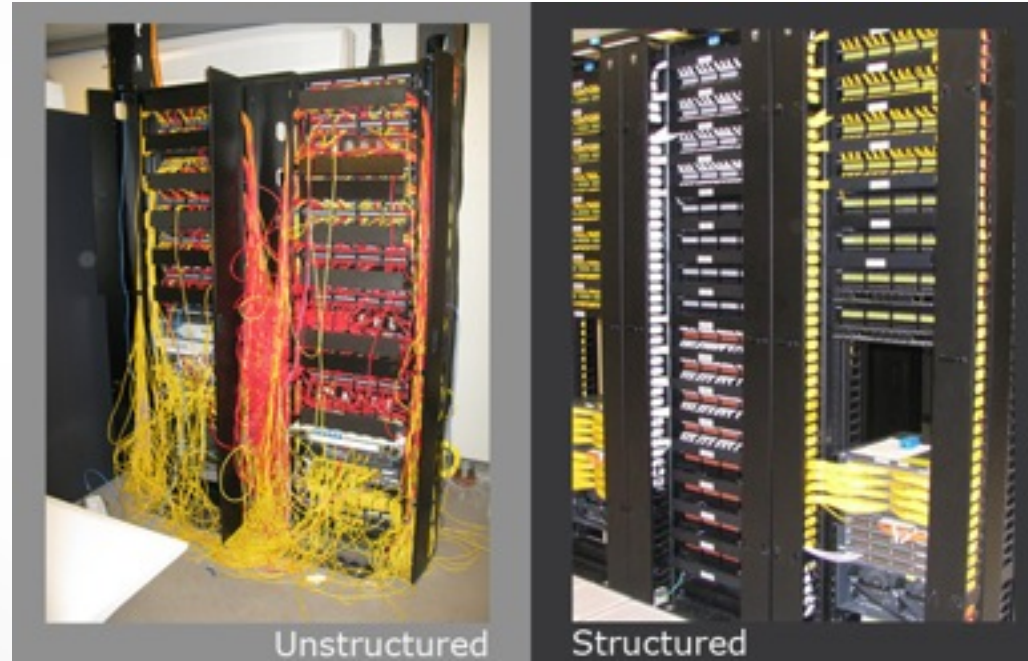


Simple systems should be simple to build
turns out they're not.
What happened to me already a view times is the following



Turns out its not so simple to build simple looking systems.

COMPLEX VS SIMPLE



What do I mean by complex, monolithic, bloated, highly coupled

Complex is not always bad

why I hate **COMPLEX**SYSTEMS



OFTEN **HIGHLY COUPLED**

THEY ARE **ERROR PRONE**

DIFFICULT TO MAINTAIN

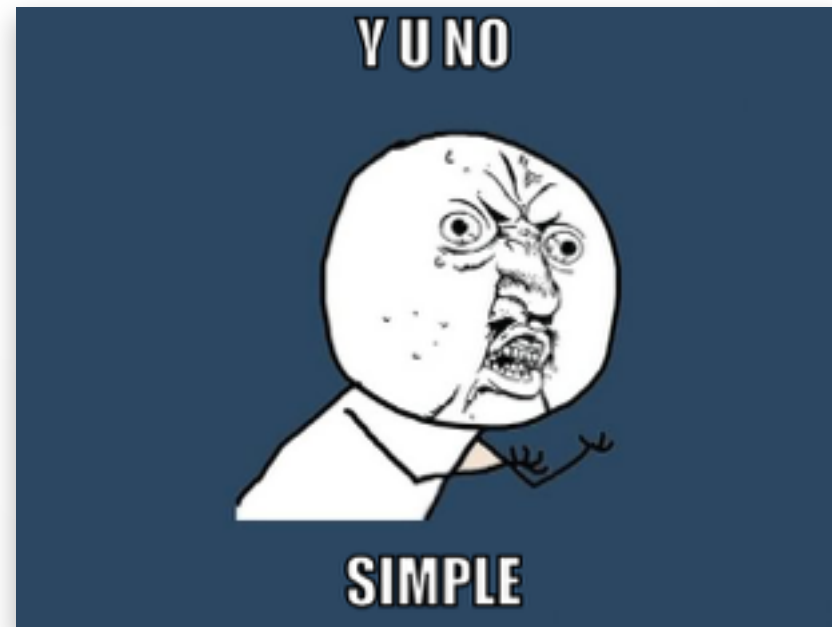
HARD TO GET STARTED

SLOW TESTS

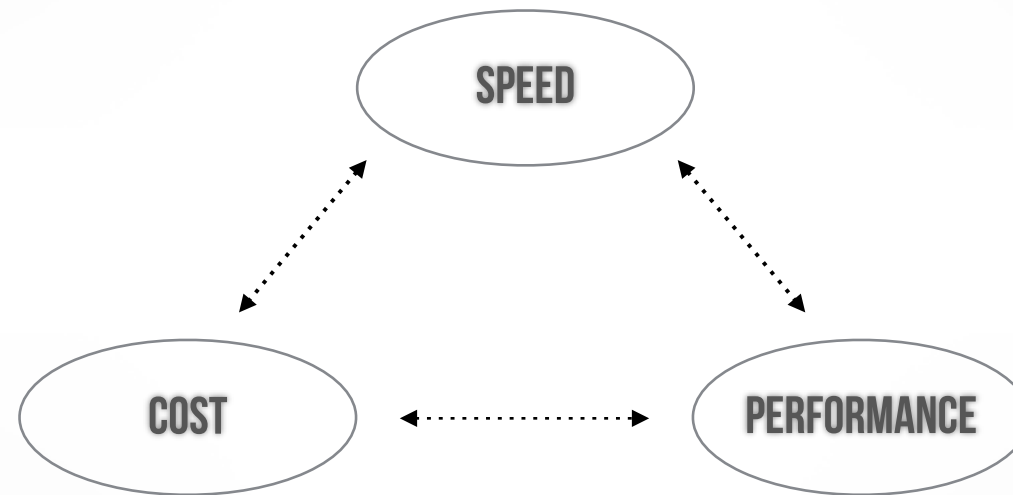
LOTS OF DOCUMENTATION NECESSARY

HARD TO DEPLOY

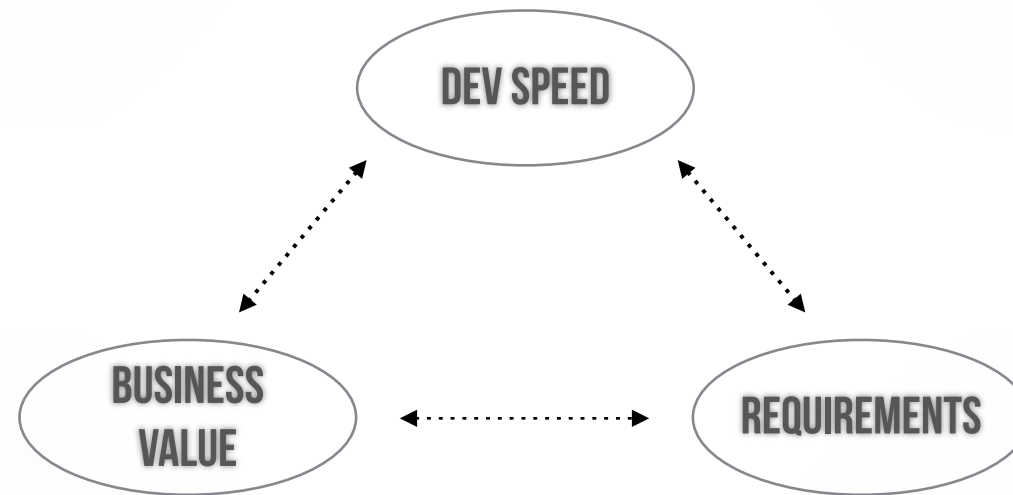
BUT WHY



REALITY IS HARD



REALITY IS HARD



SOMANYOPTIONS



TECHNOLOGY X IS FASTER

BUT I LIKE FRAMEWORK Y BETTER...

OTHER PEOPLE HAVE TO USE YOUR
TOOLBOX SO CHOOSE WISELY

I'M USED TO Z ALREADY

CONVENIENCE



QUICK AND DIRTY

POOR PLANNING

ITS JUST USED IN ONE PLACE SO...

DIVERGING FROM RACING LINE IS INEFFICIENT

I DIDN'T BUILD THIS / NOT MY JOB

For people its hard to let go of things

BUSINESSVALUE



PERCEIVED BUSINESS VALUE IN CLEANING UP
CODE IS LOW

CHAOS SEEMS HARDWORKING

NEW FEATURES GET HIGHER PRIORITY

REFACTORING FOCUSES ON FANCY STUFF

REWORK



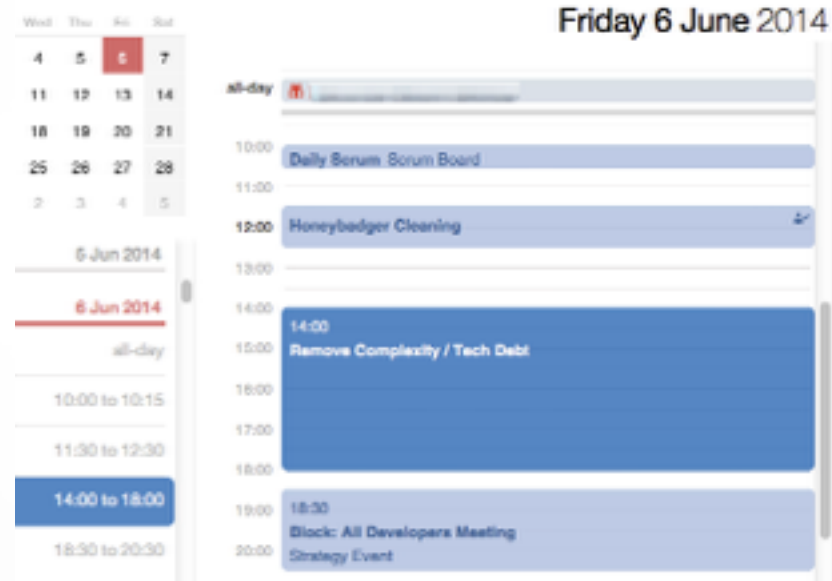
- Think two teams doing the same job. One of them spends lots of late hours fixing uber urgent problems. Lots of people sitting behind one PC
- Cross reference Hardworking vs Smart working

HOW TO IMPROVE?

Don't do it, don't build complex systems – not helpful

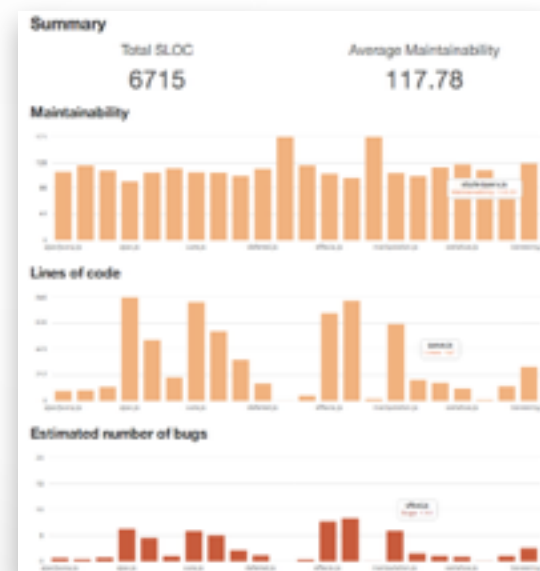
Won't solve all problems but I'll try to give some actionable hints how to improve.

DEDICATEDTIMEBOX



Consider Architecture Forum / Meetings
Spend time aligning you team
Also consider Complexity as technical debt
This also helps selling it

DATA DRIVEN



- GAMIFICATION
- MAKE COMPLEXITY VISIBLE
- INCENTIVISE SIMPLE SYSTEMS
- GATHER DATA ON HOW HARD IT WAS TO ADD A FEATURE
- HOW HARD TO REMOVE

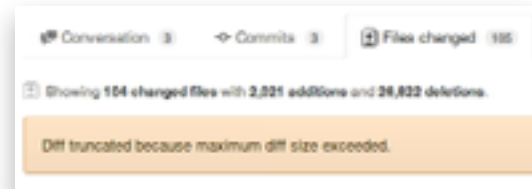
Make it visible what your concerned about

REUSABILITY **AND** AUTOMATION

- **GIVE BACK TO OPEN SOURCE**
 - You will get more feedback if others use your components / api
- **MAKE IT EASY TO CONTRIBUTE**
 - Automated setup script
 - Readme with manual steps
 - Force yourself to start fresh
- **SHARING MEANS CARING**
- **MAKE IT HACKABLE**

Open sourcing components will make sure they are self contained / clear interface / improve docs etc.

EARLY FEEDBACK



- **SEARCH EARLY FEEDBACK**
- **OPEN PULL REQUEST AFTER THE FIRST COMMIT**
- **MAKE IS EASY TO FOLLOW YOUR WORK**
- **MAKE GIVING FEEDBACK EASY**
 - Commit early and often
 - Be descriptive with your messages
- **PROGRAM IN PAIRS**
- **GATHER FEEDBACK FROM OUTSIDE YOUR TEAM**

explain 30 % Feedback <http://blog.42floors.com/thirty-percent-feedback/>

most time is spend reading code -> make it simple to do so

SMALLTEAMS

- **SMALL TEAMS DESIGN SIMPLE SYSTEMS**
- **FORCE YOURSELF OUT OF YOUR COMFORT ZONE**
 - conquer “Hard to Let Go”
- **ROTATE TEAMS**
- **ITS EASY TO MAKE A DIFFERENCE IN SMALL TEAMS**
- **PEOPLE TAKE MORE RESPONSIBILITY**
 - truck number will be lower

- Helps conquer “hard to let go” problem
- Mythical man month told us already if you have 3 teams you get a 3 layered system
- Possible problems:
 - * truck number lower but shouldn’t be a problem when rotating more often and products are small&simple

HARALD WARTIG



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