

So You Want To Rewrite That...

Lessons from a successful rearchitecting

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We were failing to support our
growth, our customers, and our
technology

Everything's not fine.



4895

Collision on Box 2 km. June 1st 1895

A rewrite will solve all my problems!



There's no such thing as a
successful rewrite

The sustainable rewrite looks like firefighting

Cliff Moon, Boundary

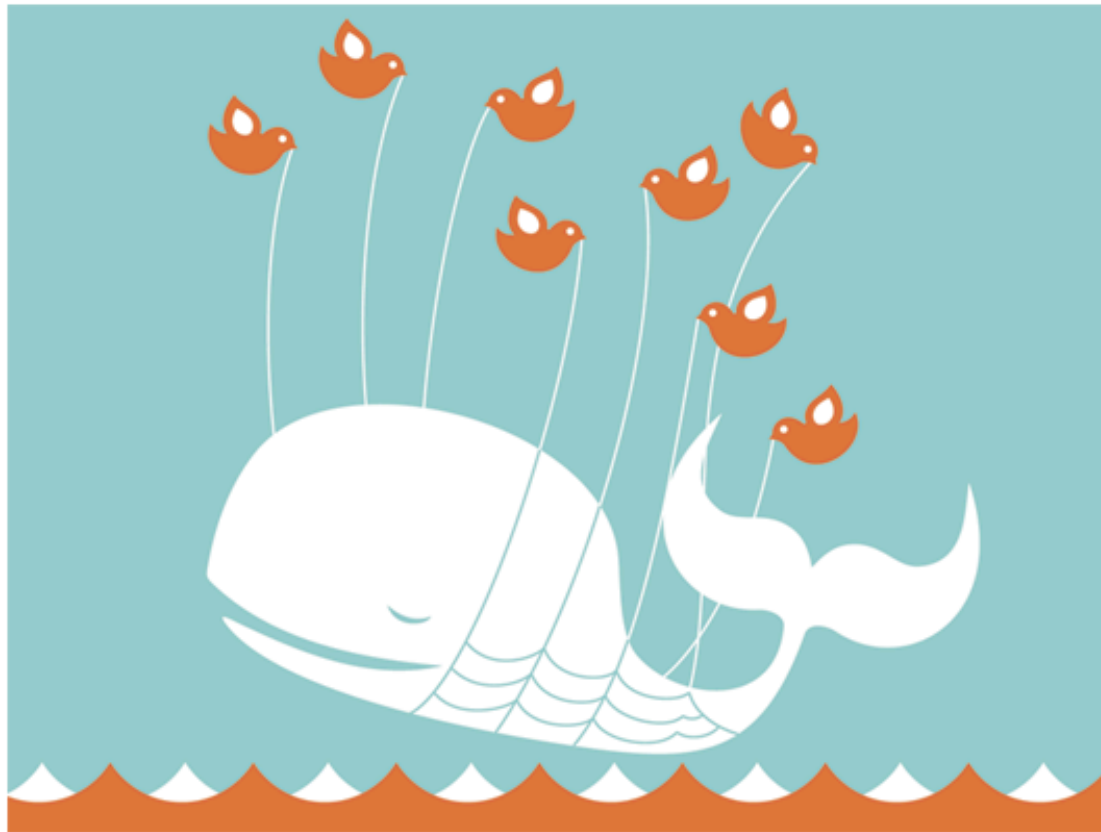
**THE PATH TO REWRITING IS
FRAUGHT WITH DANGER**

You're failing now.

You can't scale.

Twitter is over capacity.

Too many tweets! Please wait a moment and try again.



You can't meet customer demand.



You're crushed
under the
weight of your
technical debt.



It is easy to fail on the unknown
unknowns

How well do you know what the code is doing now?



This doesn't look THAT big...

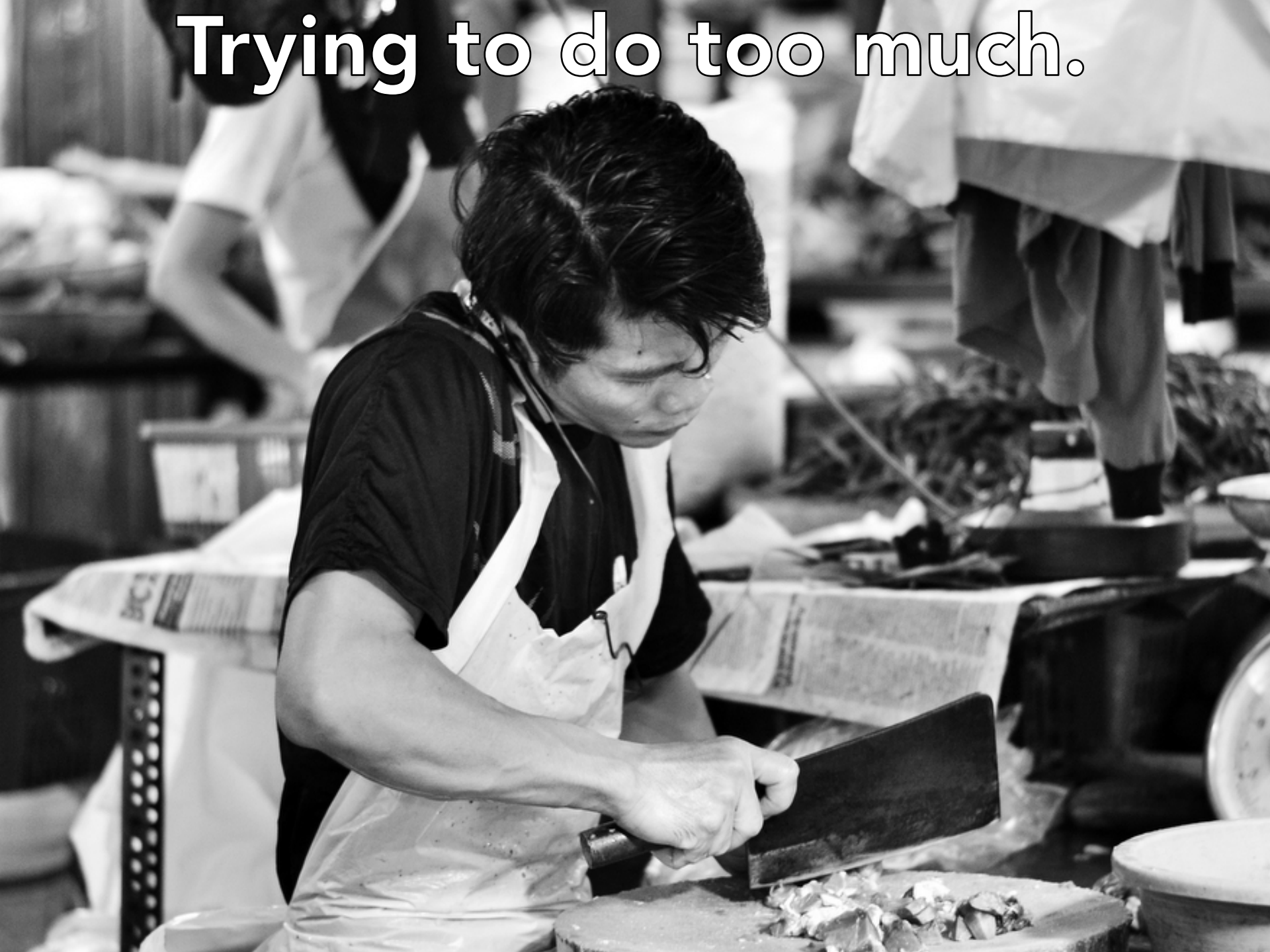
What about the data?

How does the team need to change to make this successful?



The sirens will tempt you off
course.

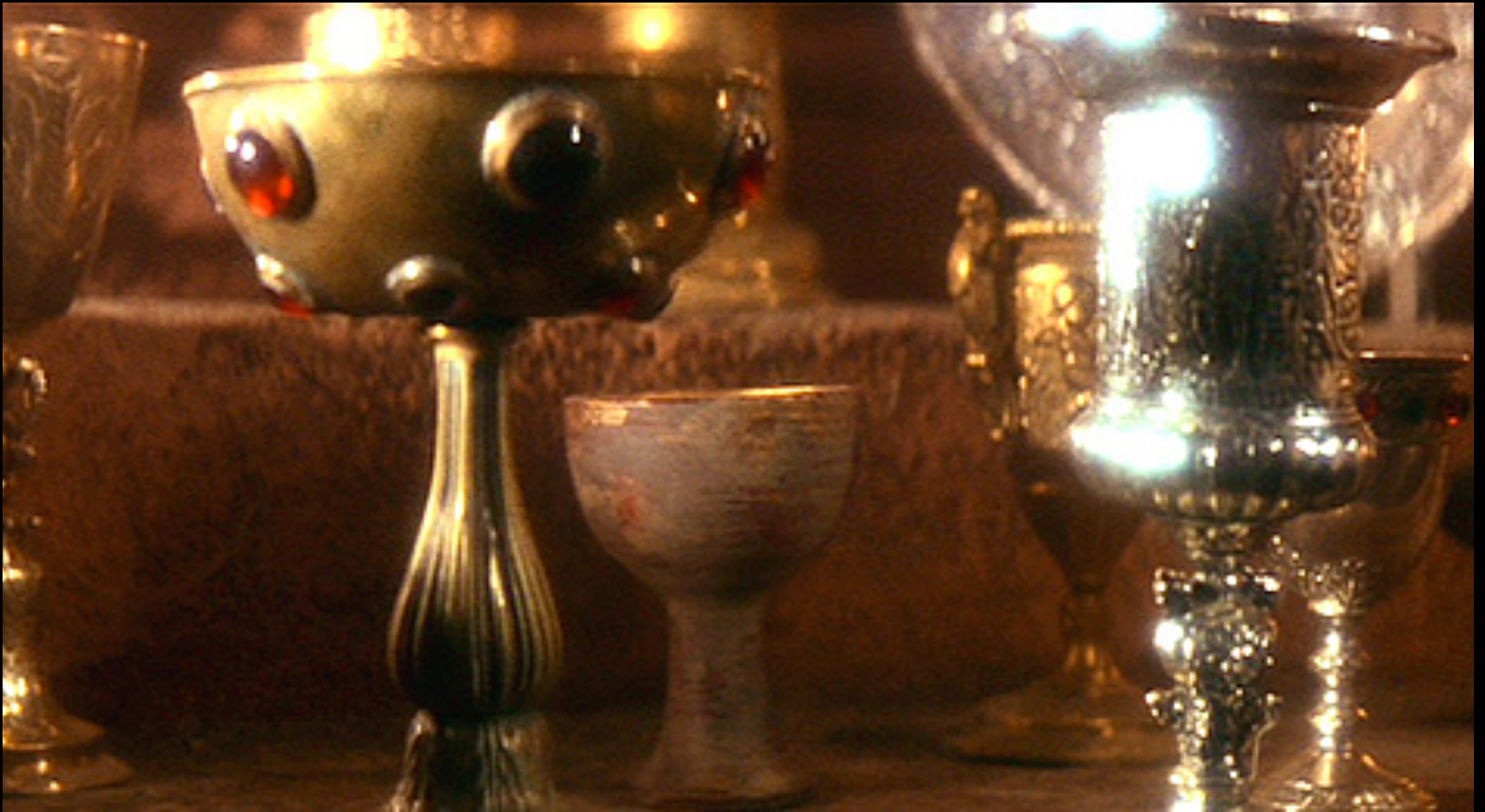
Trying to do too much.



Counting on a
“big bang”
release.



Choosing the wrong software.



Choosing the wrong software.



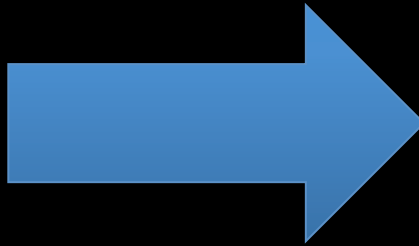
**WHAT ARE THE PRINCIPLES TO
MAKE THIS SUCCESSFUL?**

Change as little as possible.

Don't rewrite at all, modify in place!



Rewrite but keep the language the same.

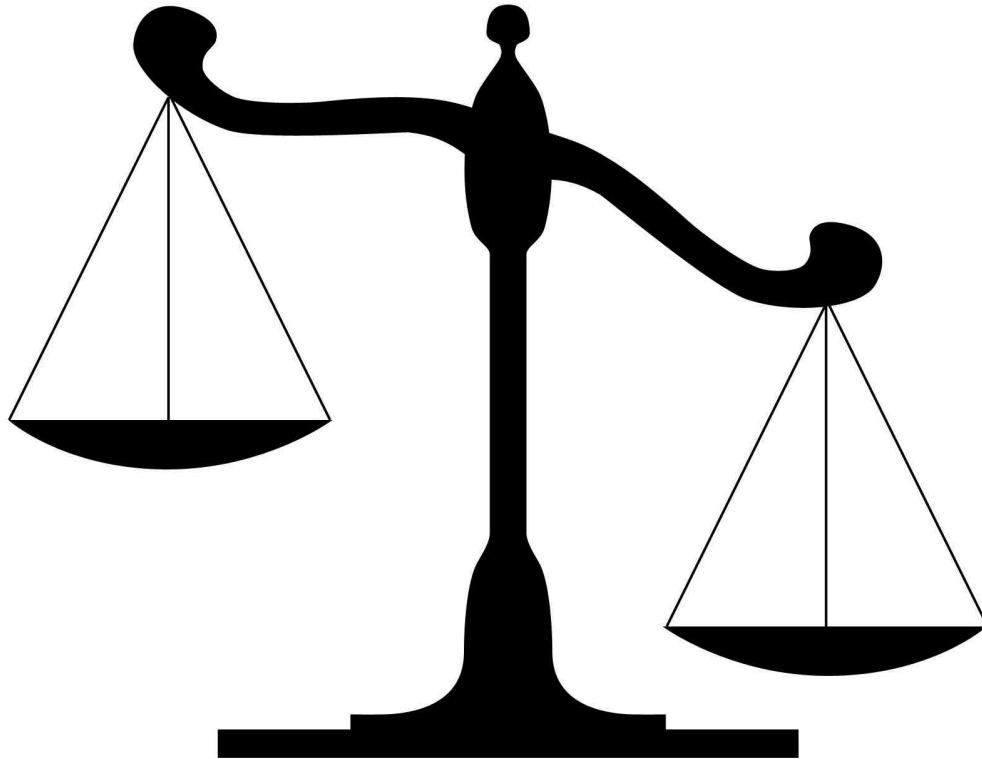


Change only one thing at once (salami
slicing)

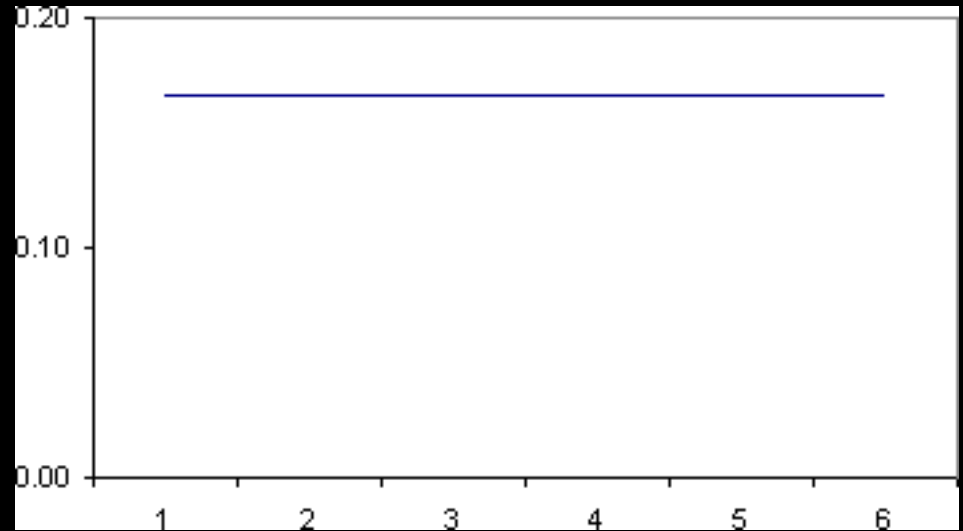
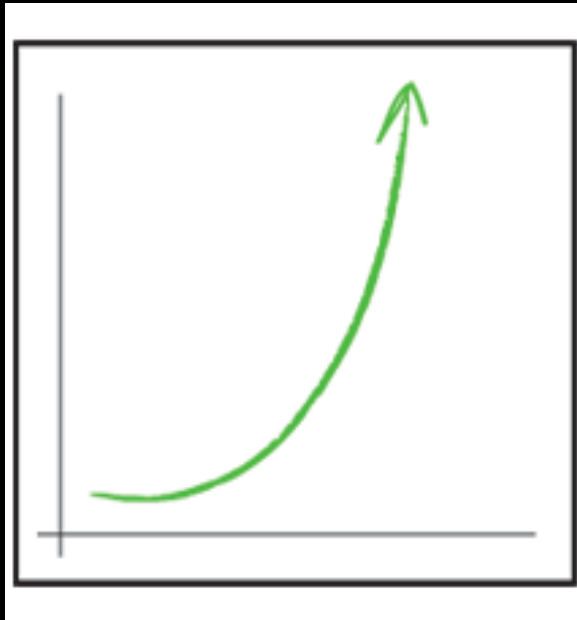


You need to sell this.

Sell it to yourself first.



Sell it to the business with Big Scary Graphs.



Sell it to your team.

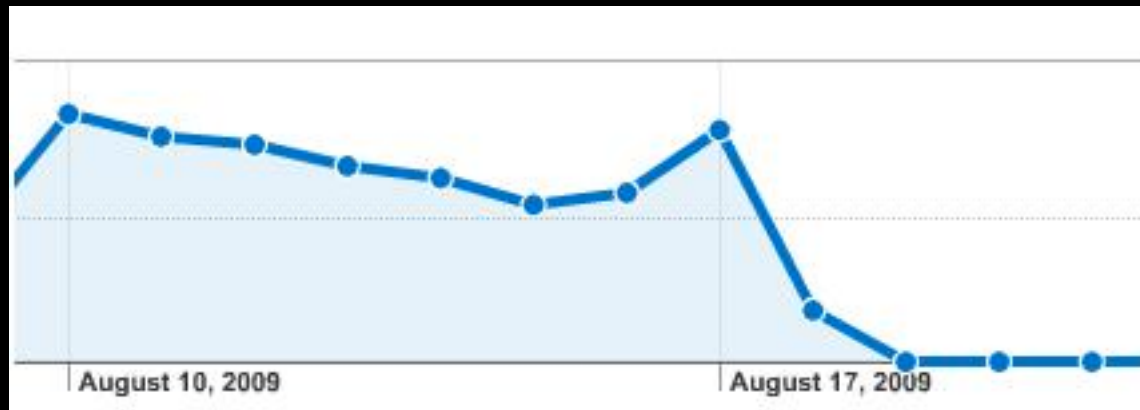
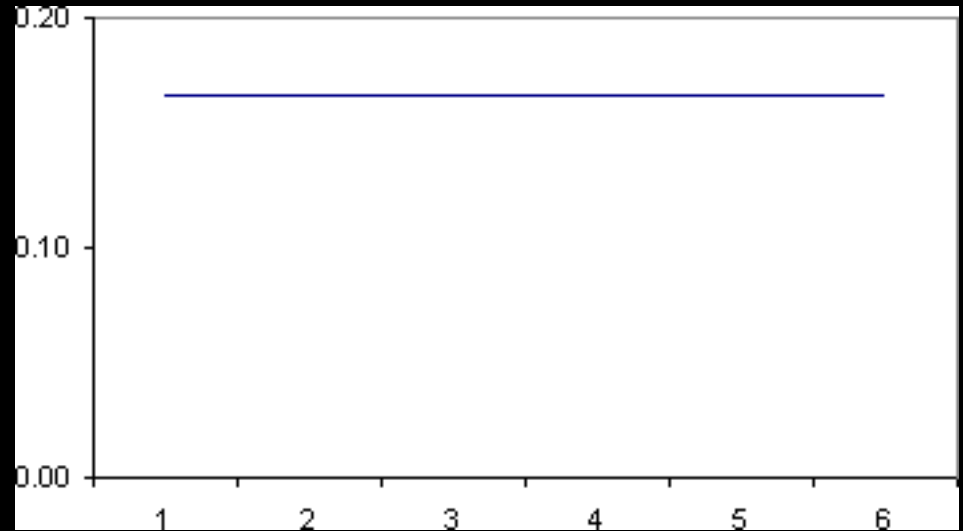


You need a detailed definition of
done.

A test
suite that
acts as a
safety
harness.



What is the quality we're measuring to improve?



What is our data migration plan?

**WHAT DOES THE OUTCOME LOOK
LIKE?**

Your culture will change in the
process.

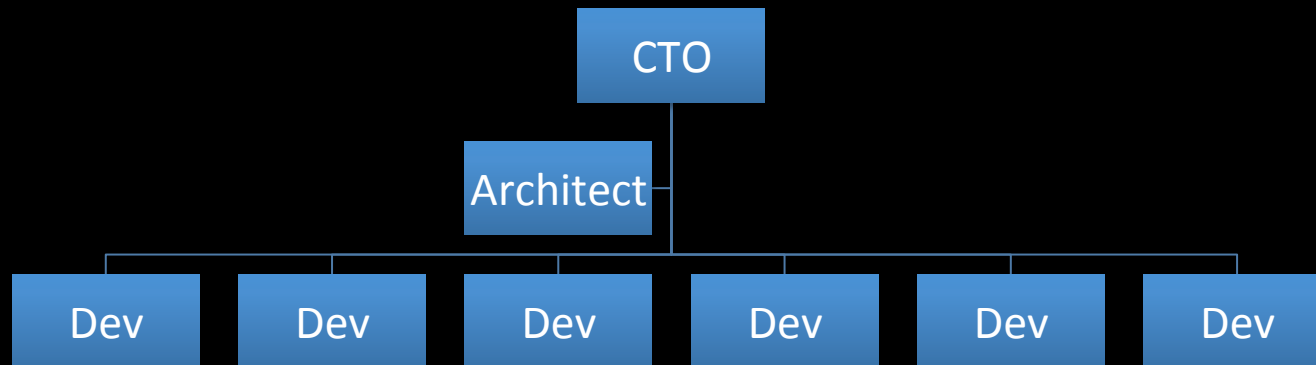
Long-time employees may feel threatened.



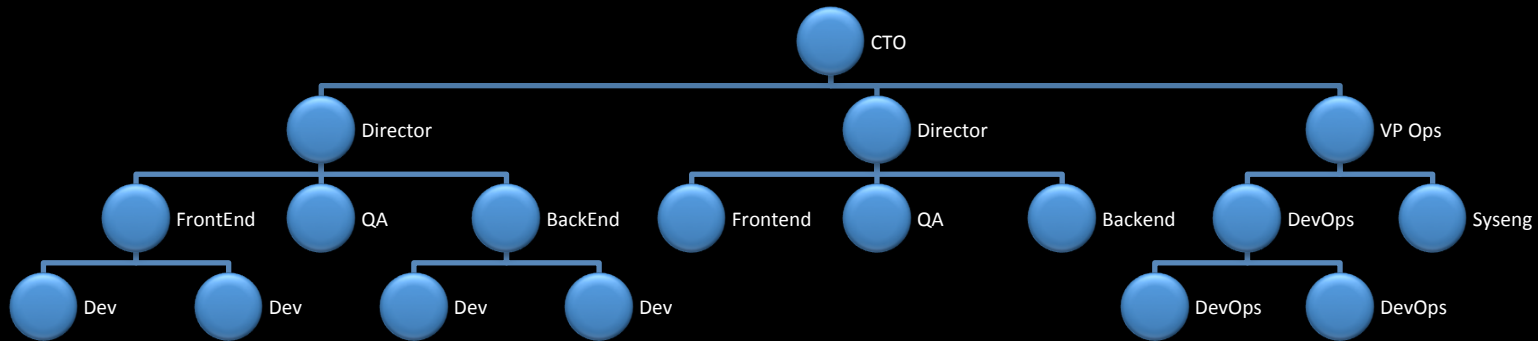
Workflows will have to change.



The structure of your team changes.



The structure of your team changes.

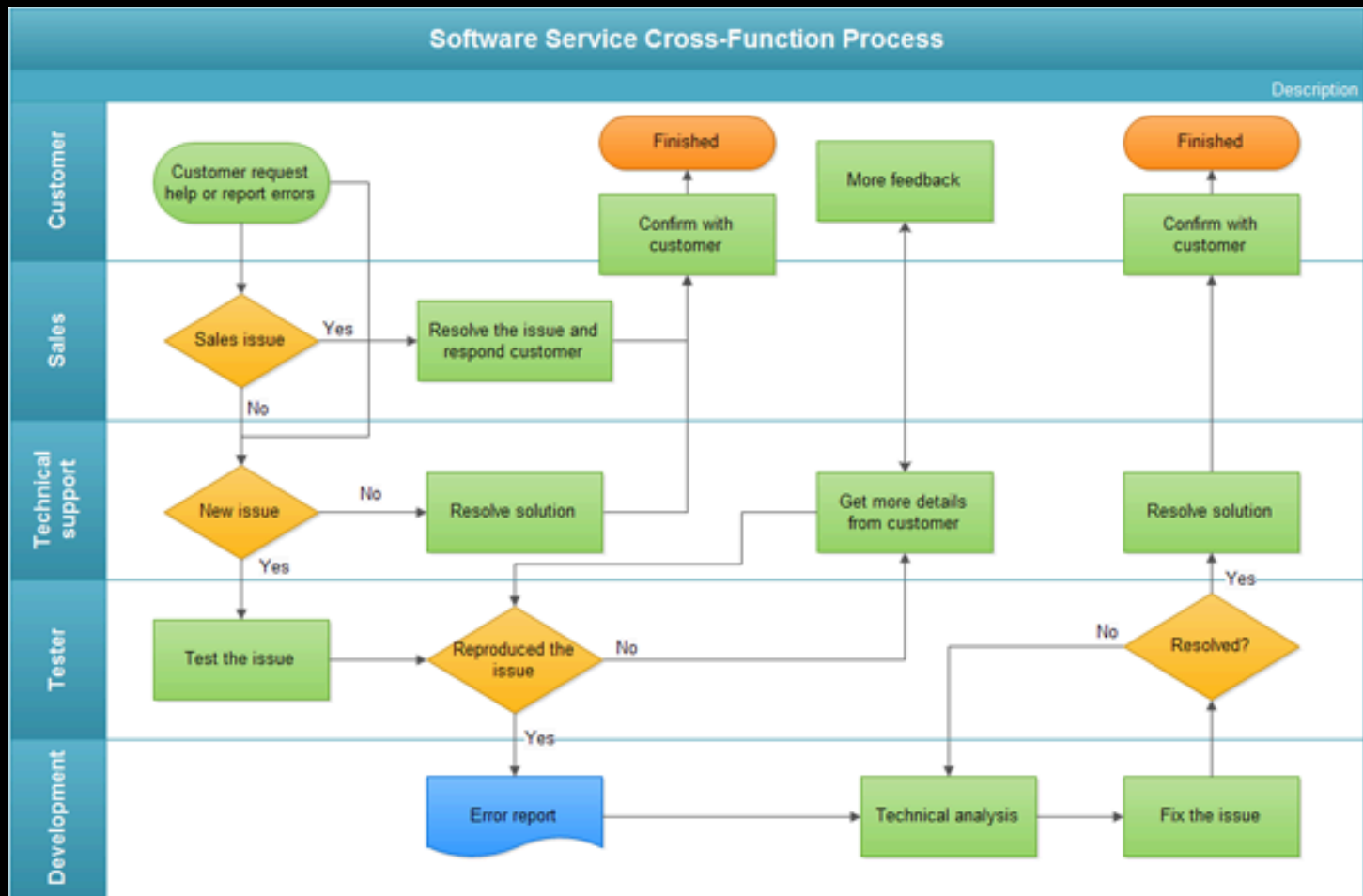


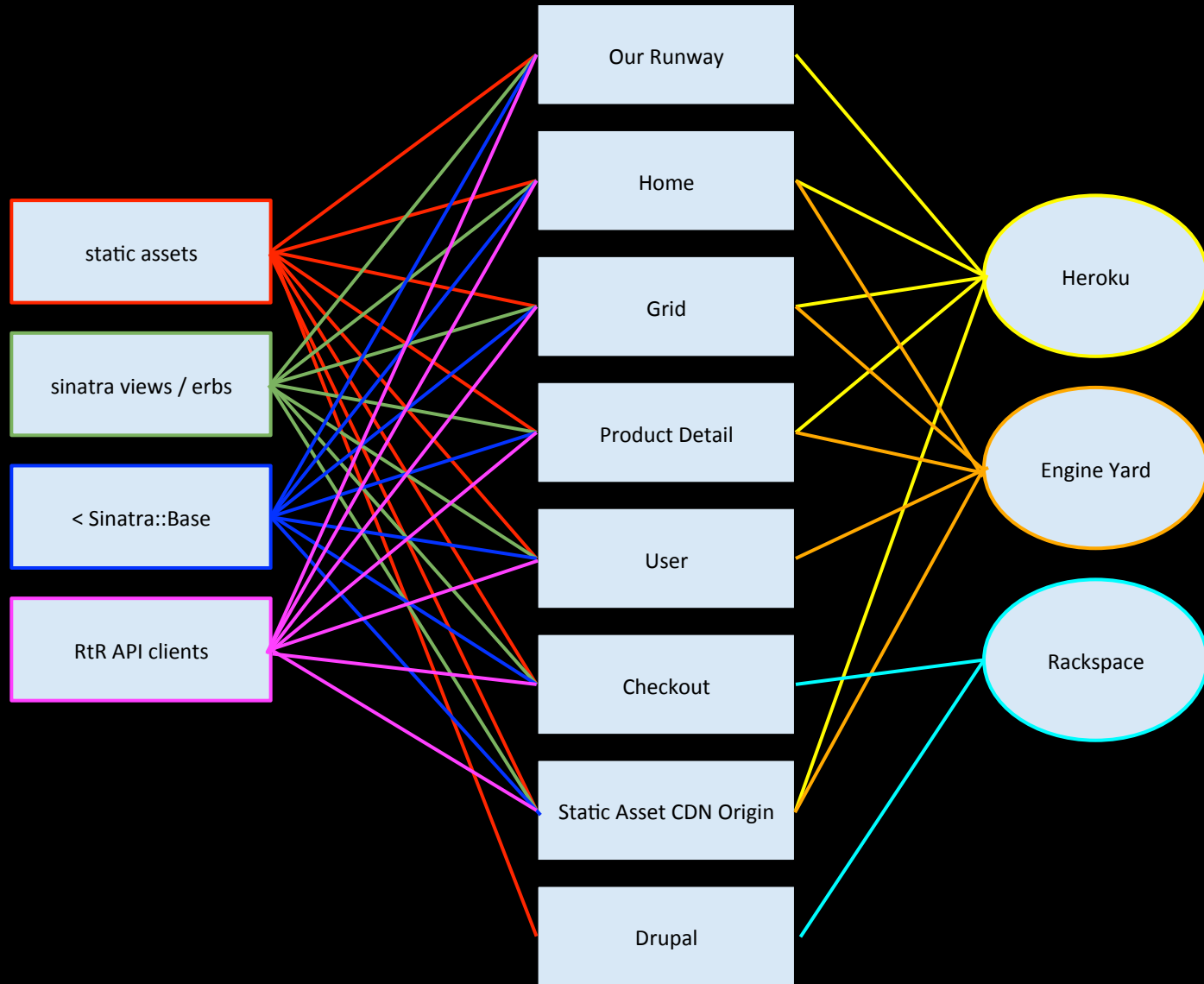
A new architecture brings new
challenges.

Tempting to make v2 everything you
ever wanted!



Overengineering can happen to process, too.





You're never really done.



You create a system that will last
longer than its predecessor.

You have the flexibility to build the
things you will need.

You have standards around that flexibility to mitigate complexity.

Build with the needs of a larger or smaller team in mind.

Everything isn't fine.



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It's time to rewrite.

Sell it, change as little as possible,
and know what done looks like.

Prepare for a brave new world.

Create a sustainable future.



Thanks!

- @skamille
- Rent the Runway is hiring!
renttherunway.com/careers
- My blog: whilefalse.blogspot.com

credits

- www.mccord-museum.qc.ca/fr/collection/artefacts/MP-0000.2265
- [Zombie mob: https://www.flickr.com/photos/aheram/219515706/](https://www.flickr.com/photos/aheram/219515706/)
- Fail whale: [Rob Friedman / playerx / @px](#)
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- https://www.flickr.com/photos/matt_gibson/3281131319
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