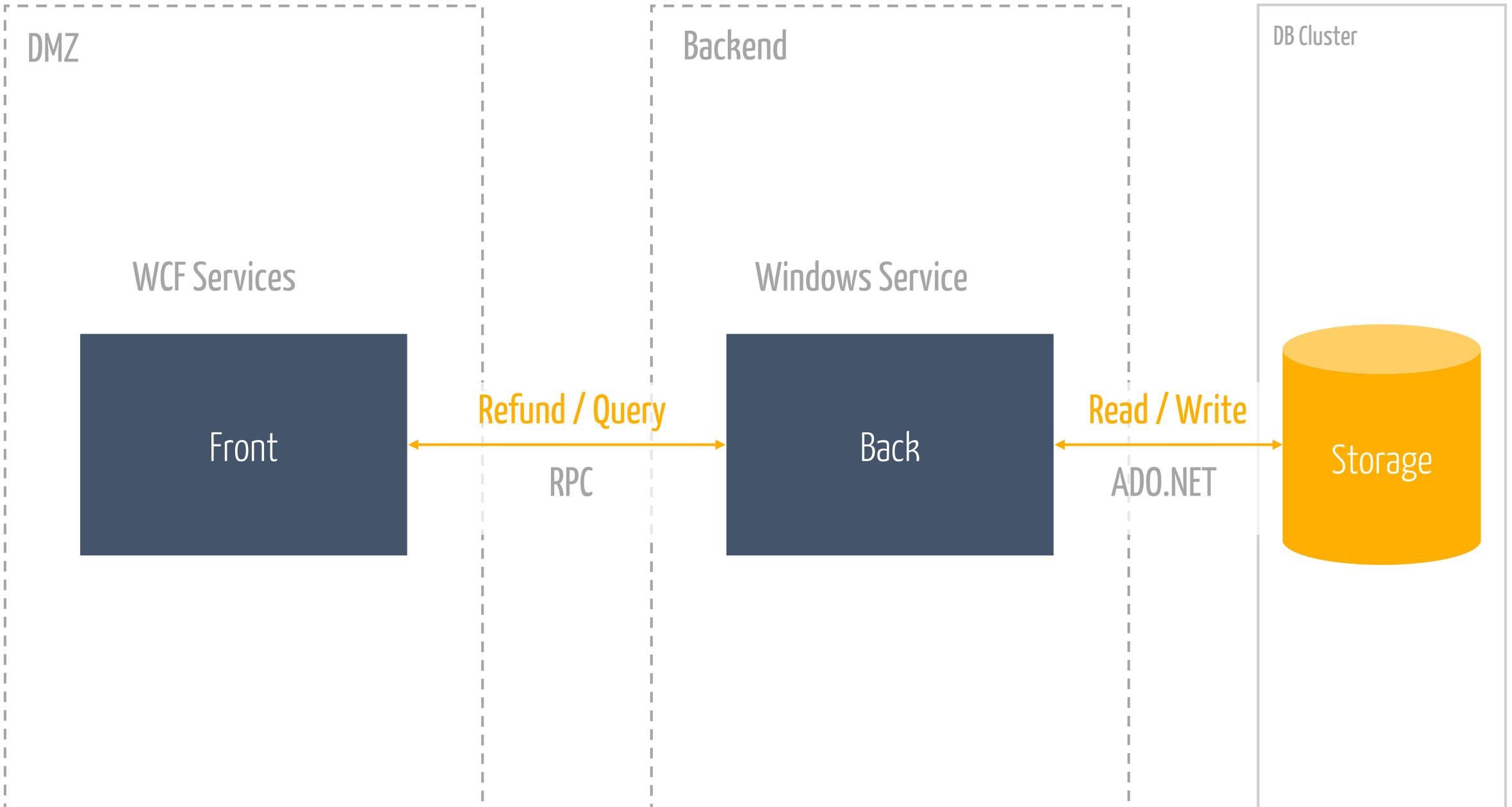




# DIY Async Message Pump

## Lessons from the trenches

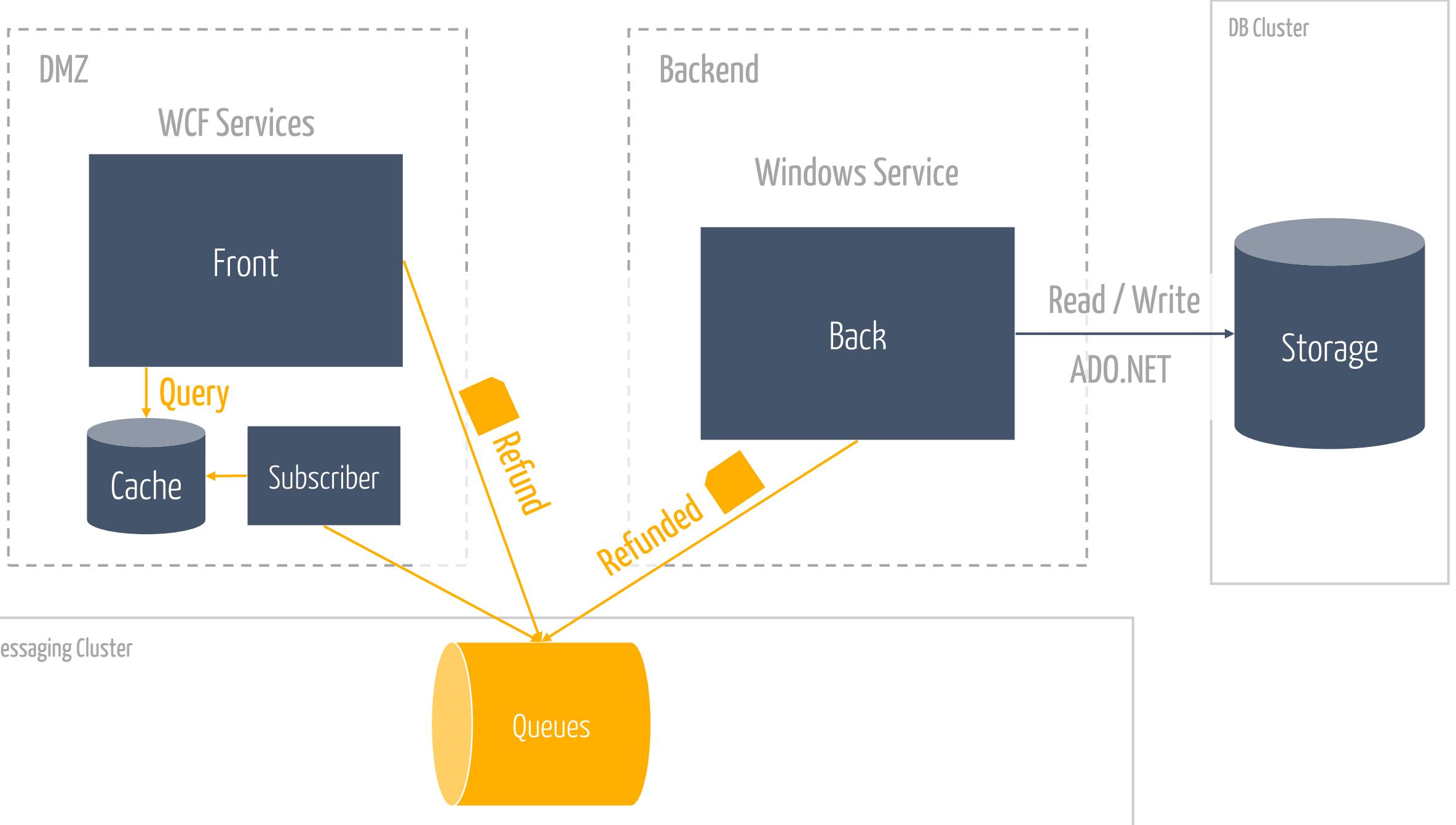


The RPC callstack of

doom

praise the lords of

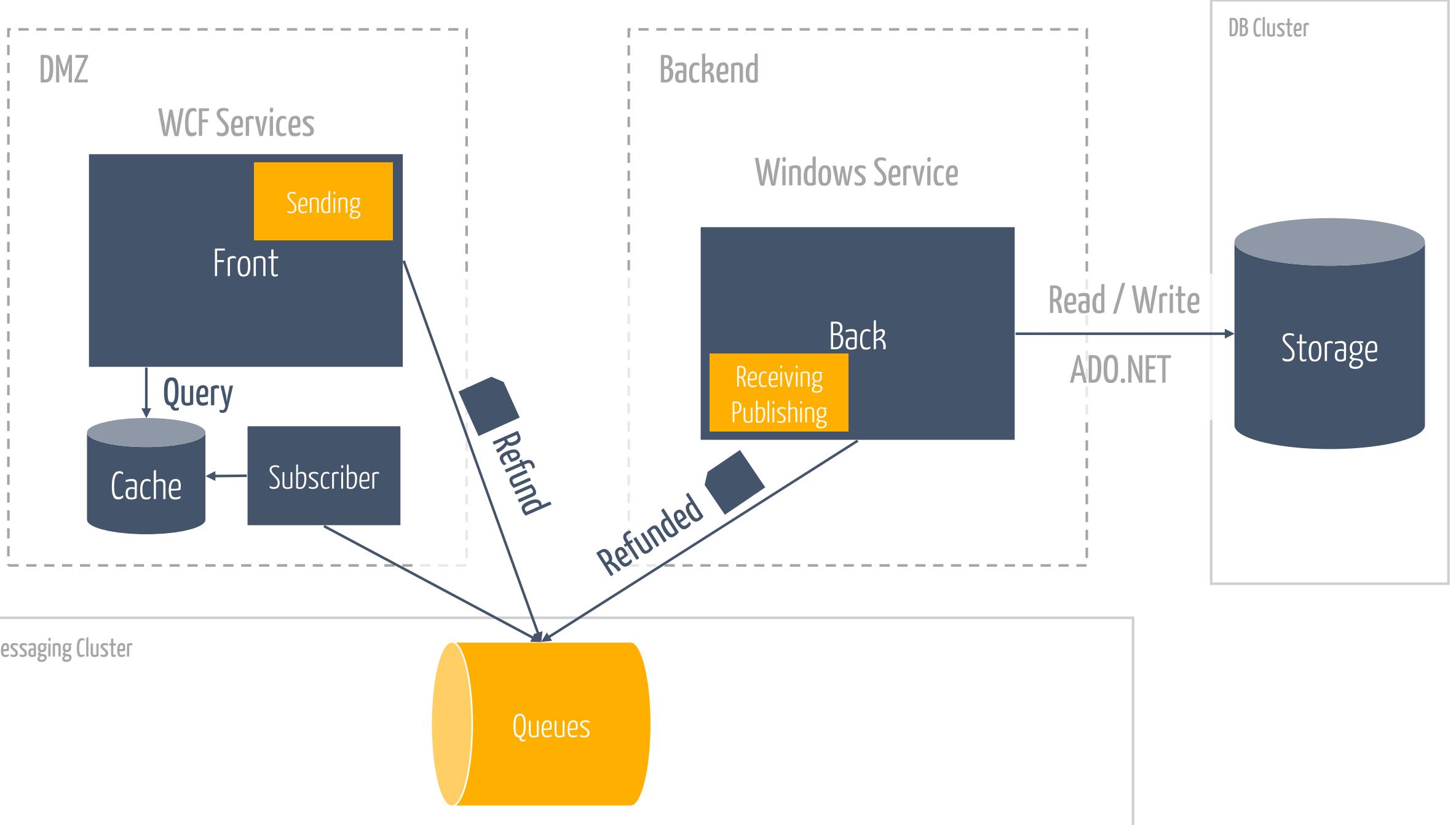
messaging



# Build

or

# Buy



Building the

pump



TPL handwaving

Cooporative cancellation 101

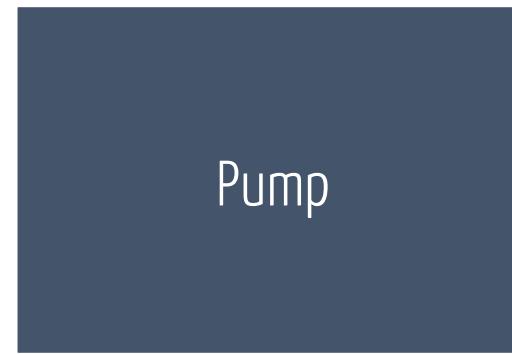
Async / Await

Ship it!

It worked until



Rush hour



Let's throw in some

concurrency

Just a tiny change...  
Introduce Fire & Forget  
Ship it!

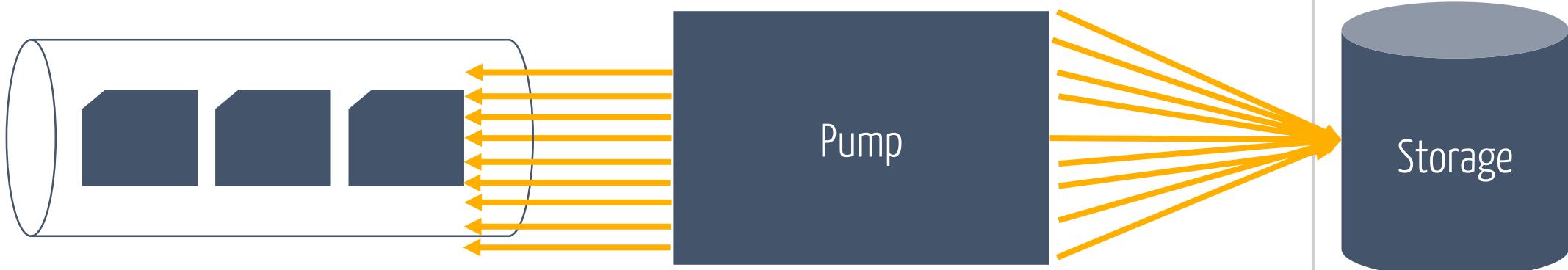
It worked until





Rush hour

The word "Rush" is rendered in a large, bold, orange sans-serif font. The letter "R" is partially overlaid by a vertical stack of five smaller, semi-transparent orange bars of varying heights, creating a sense of motion or depth. The word "hour" follows in a similar bold, orange font.



DB Cluster

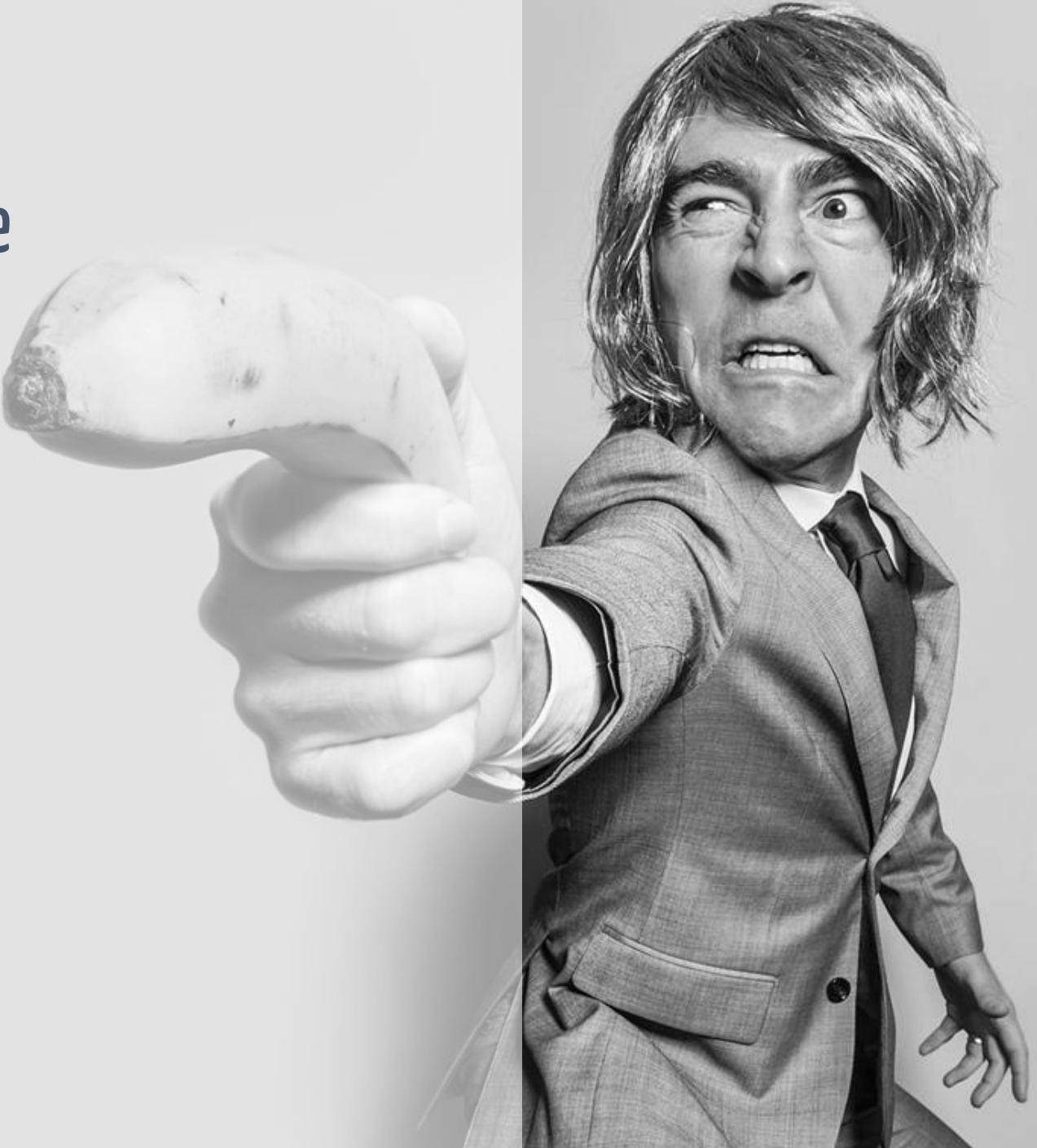
Storage

Better limit

concurrency

Semaphore controls floodgate  
Ship it!

It worked





As time passes

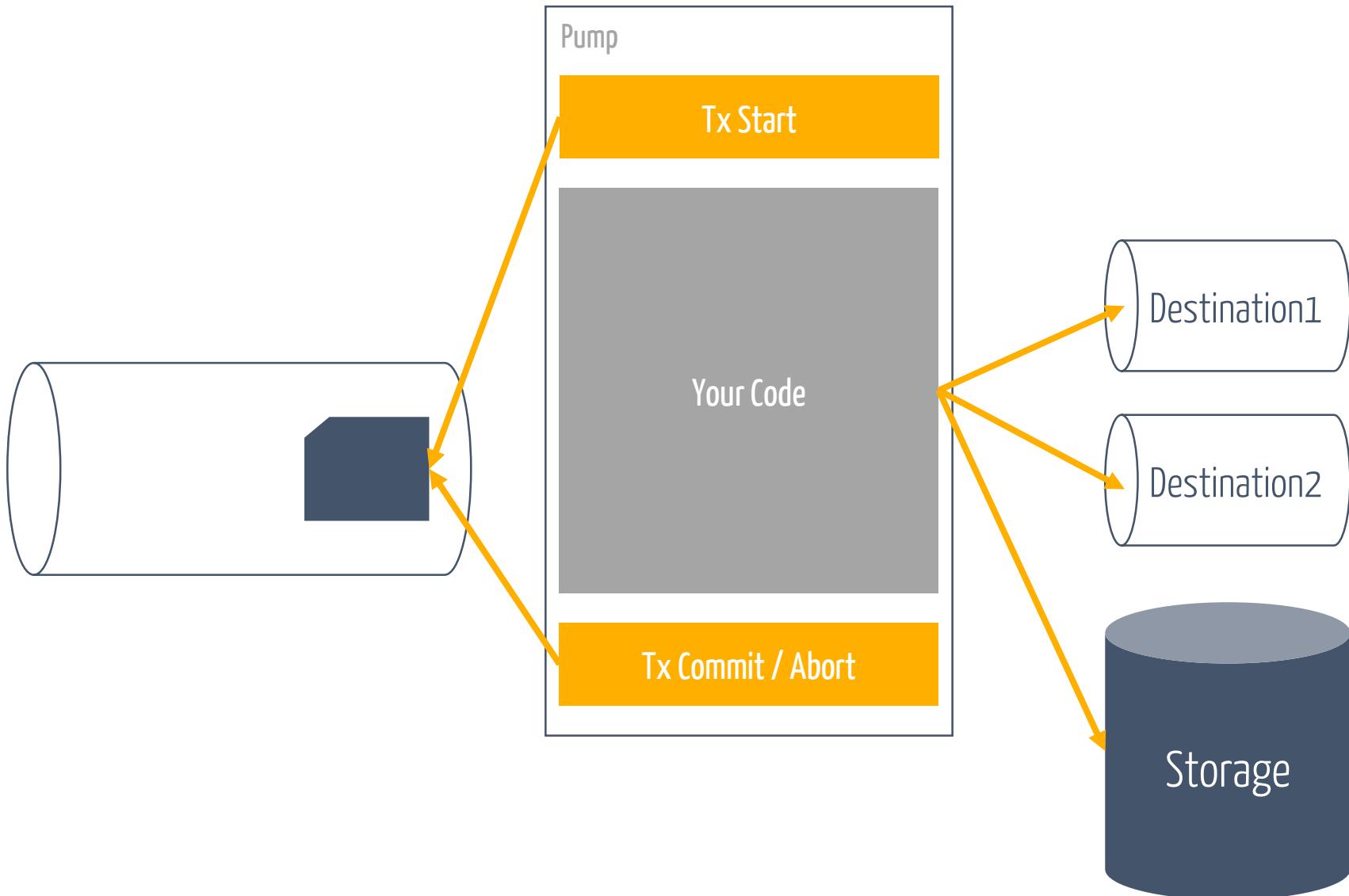
Make it

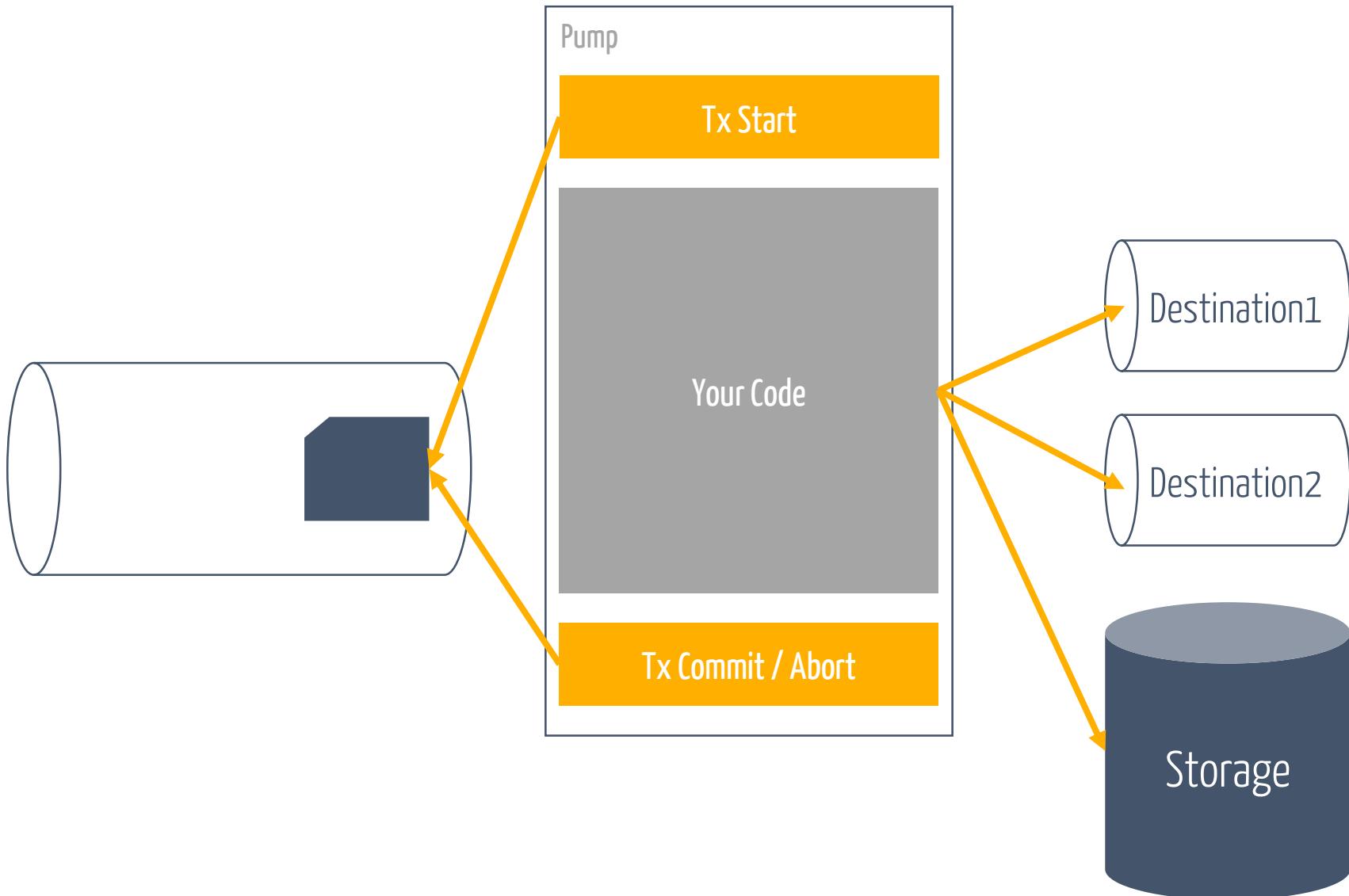
flextensible

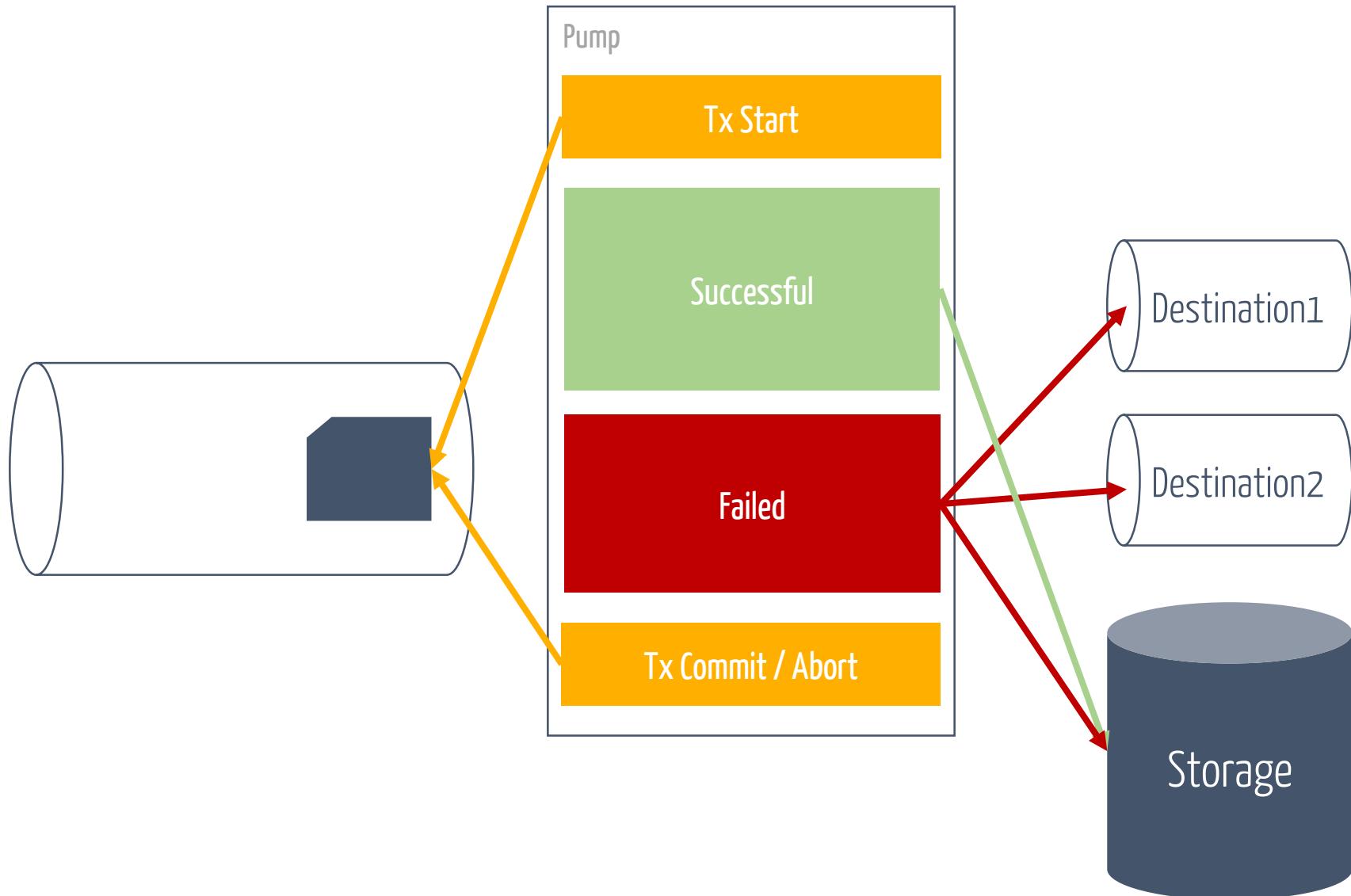


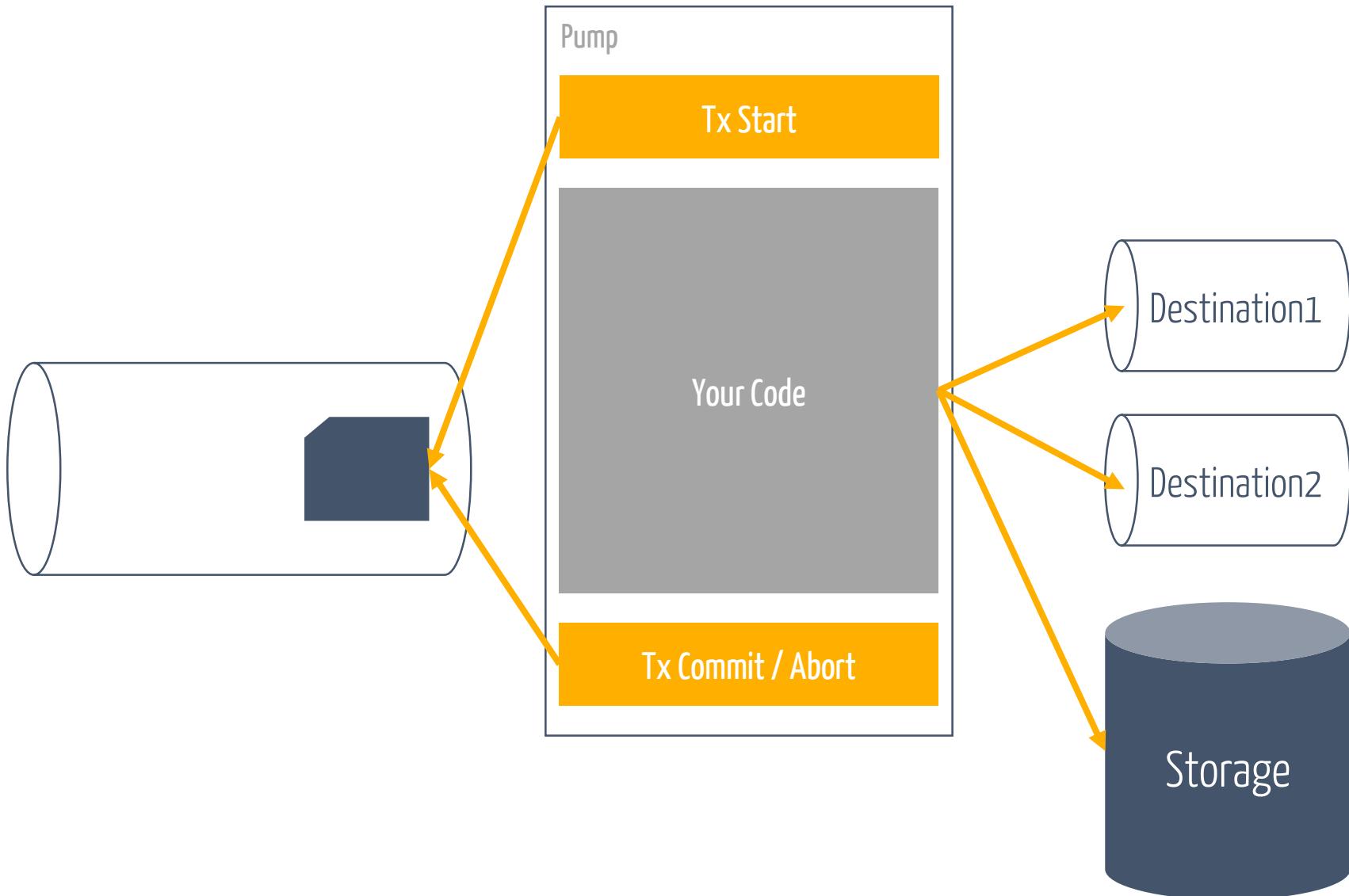
Life beyond

transactions



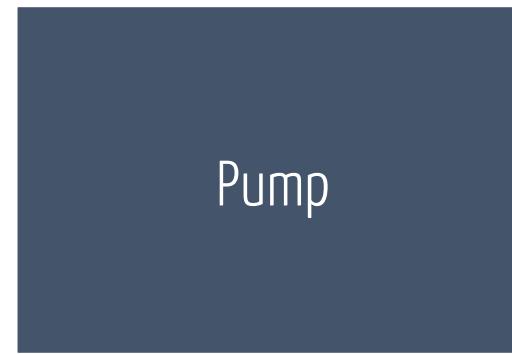


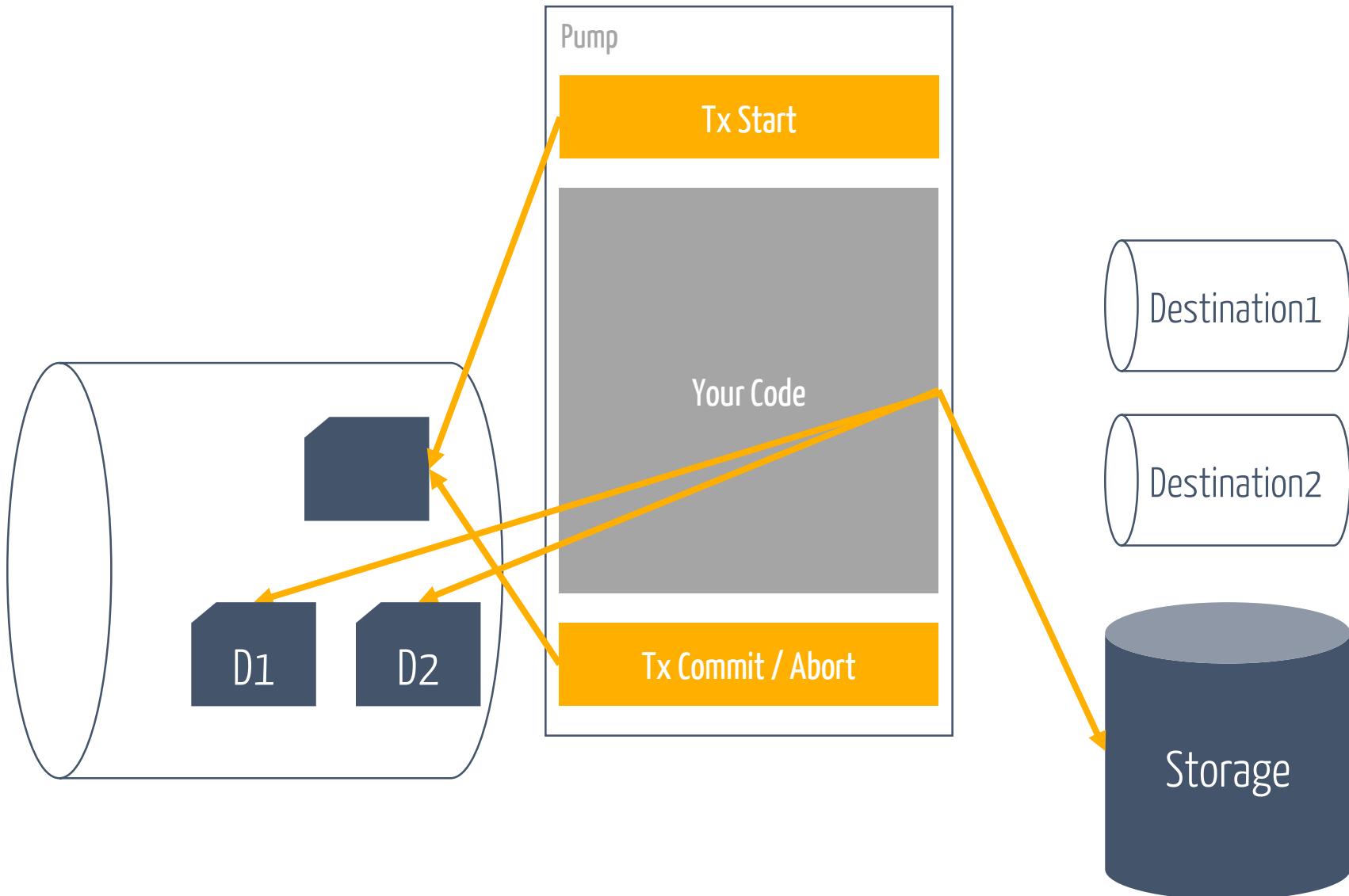




Cloudy with a chance of

failura





# Penny Pinching

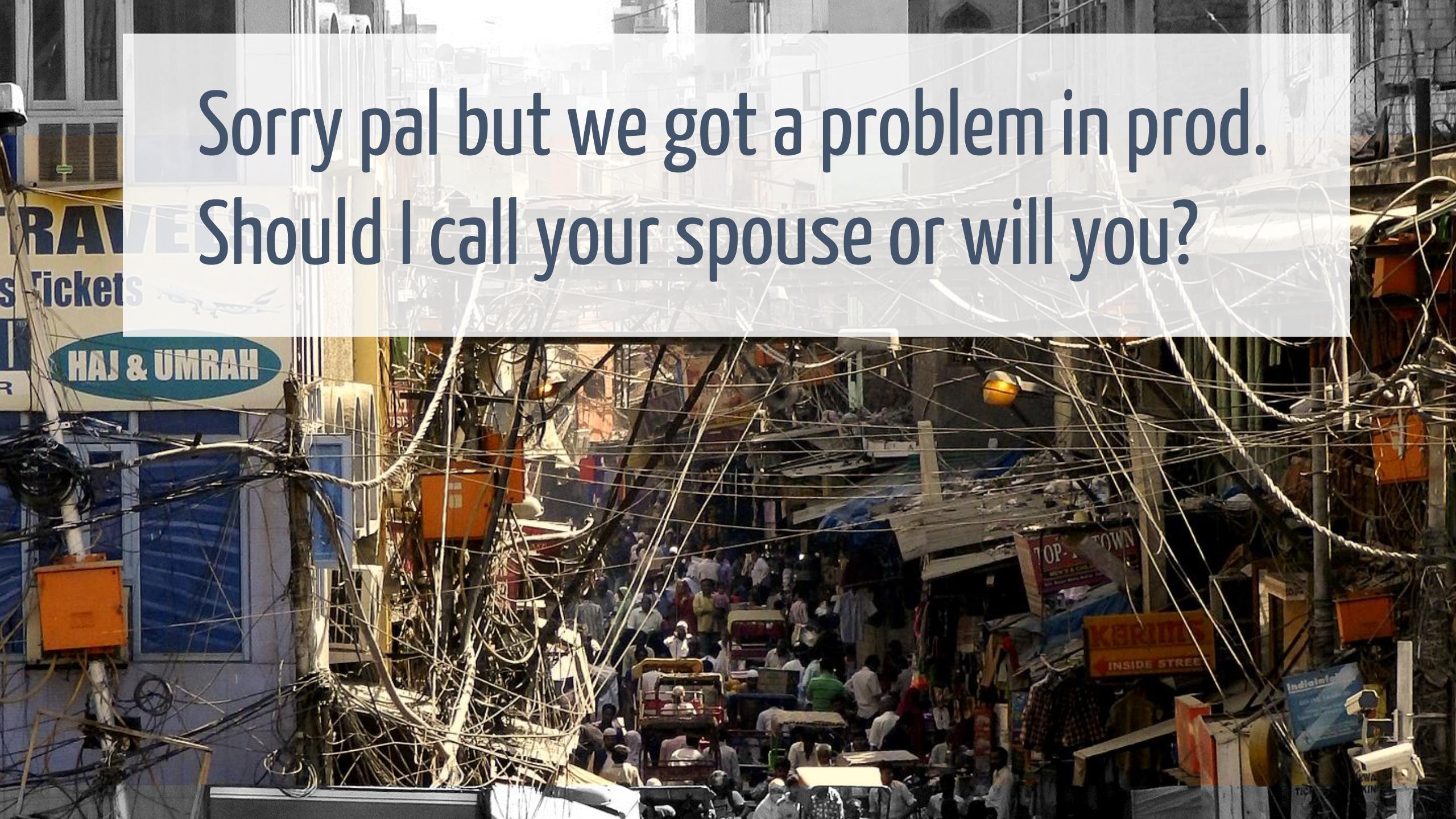
Now we have the

basic bits

# Living on the edge of sanity



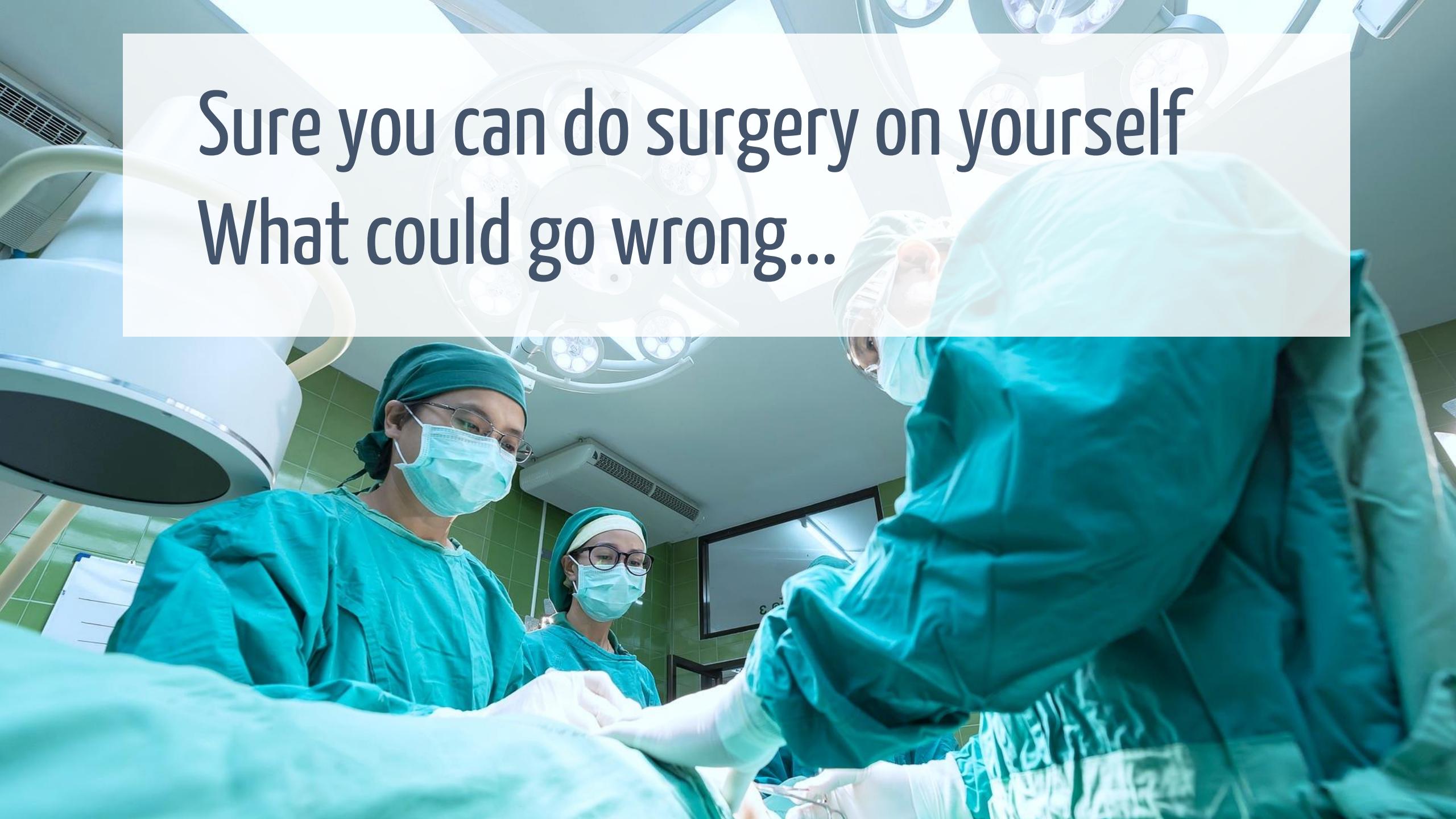
Sorry pal but we got a problem in prod.  
Should I call your spouse or will you?



A pair of binoculars is positioned diagonally across the frame. The lenses are clear and reflecting light, while the body and eyecups are a textured grey. The background is a soft, out-of-focus grey.

I want  
insights

Sure you can do surgery on yourself  
What could go wrong...



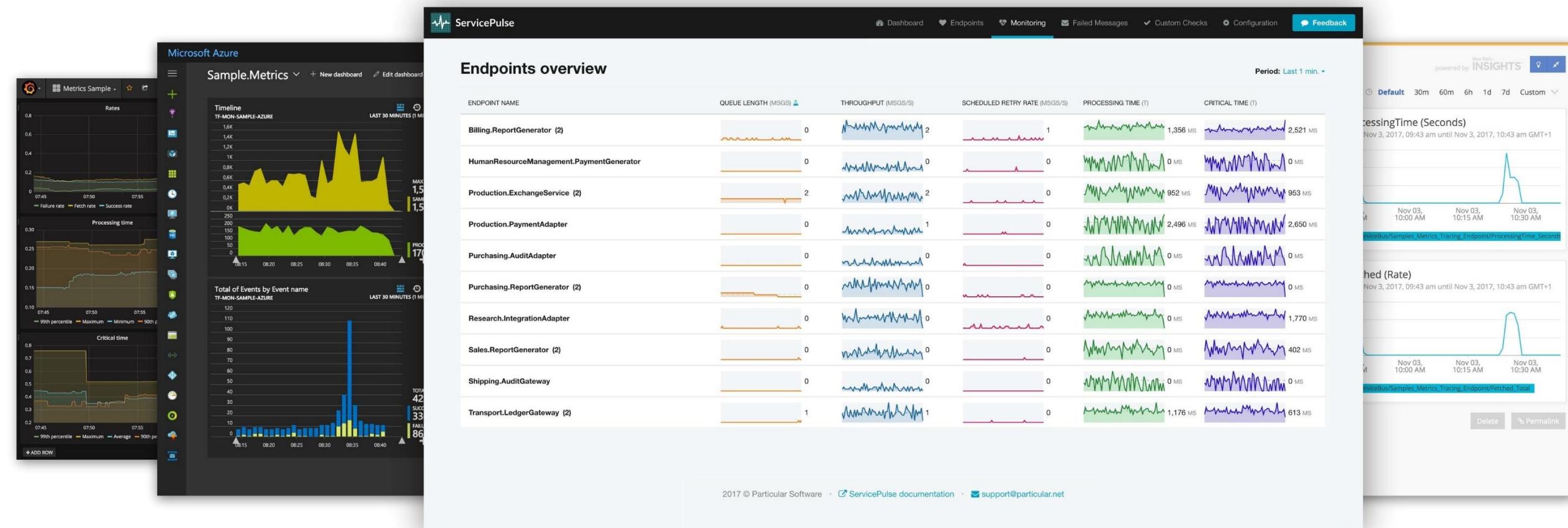


# Thanks



[go.particular.net/ndcoslo19-parsec](http://go.particular.net/ndcoslo19-parsec)





go.particular.net/demo

# Slides, Links...

[github.com/danielmarbach/MessagePump](https://github.com/danielmarbach/MessagePump)



# Q & A



Software Engineer  
Microsoft MVP



@danielmarbach  
[particular.net/blog](http://particular.net/blog)  
[planetgeek.ch](http://planetgeek.ch)



# Thanks