

# Agile ORLANDO JULY 24-28 2023

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#AGILE2023

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Dane Weber

## The Undercover Scrum Master Returns



**Agile** ORLANDO  
JULY 24-28 2023

#AGILE2023

**THE UNDERCOVER  
SCRUM MASTER  
RETURNS**

# DANE'S UNDERCOVER MISSION

# PRIOR OPERATIONS

- Philosophy & Clinical Psychology
- Business Analysis, Support, Account Ownership
- Product Owner & Scrum Master
- Agile Coach

# THE MISSION

🏛️ E-Verify

✨ LeSS

🐳 Big Sillies 🦊 Faux Pas 💻 Bits, Please!

💻 Full-Time Developer on Scrum Team

# THE RETURN

- Technical Agile Coach
- Engineering Manager
- Software Developer (again)

# **BASELINE ASSUMPTIONS**

# AGILE MANIFESTO

Agility > Efficiency

# **HUMANITY AND BEING HUMANE**

## People First

# SUSTAINABLE PACE

Long-term thinking

# CROSSING THE TECHNICAL DIVIDE

Is development experience required to coach  
developers?

No

Do you need to be a surgeon to work in a hospital?

No

How about to coach surgeons?

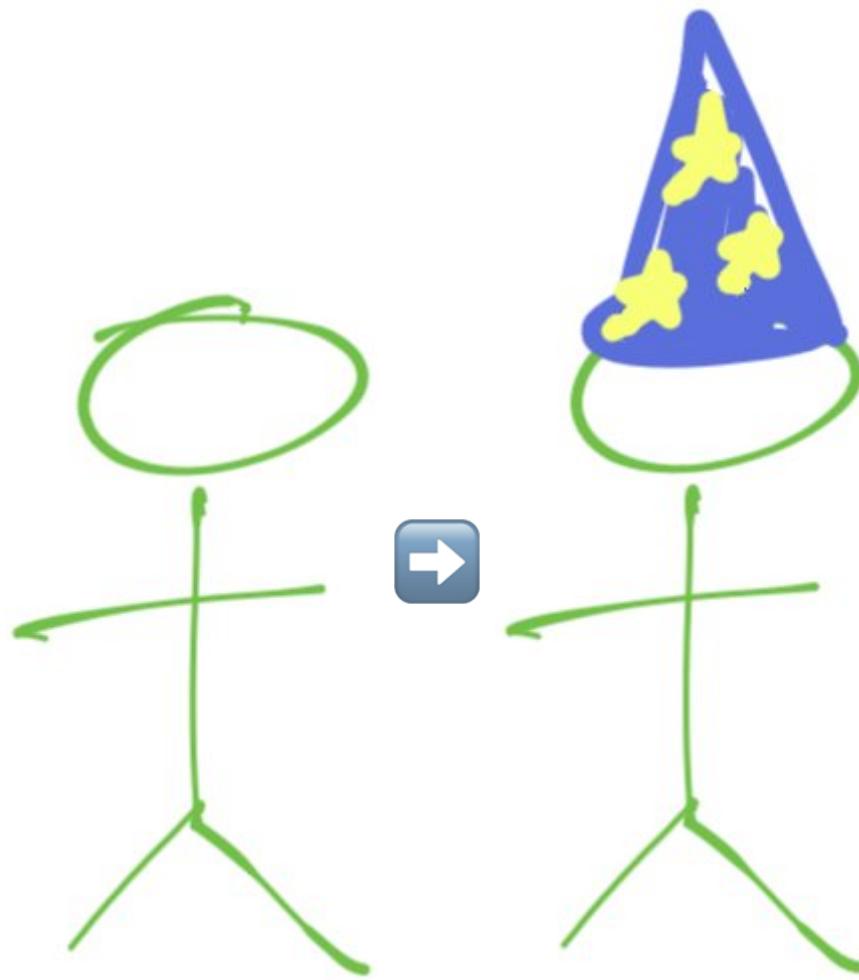
# KEYS

1. Collegiality
2. Empathy
3. Curiosity
4. Advocacy
5. Challenge

# **COLLEGIALITY**

## collegiality

1. working with colleagues in an effective and cooperative manner
2. power and authority that is shared among peers



~~Technical~~ **Mysticism**



People who code are like

~~Crane Operators~~

Architects

*There are 2 hard problems in computer science: cache invalidation, naming things, and off-by-1 errors.*

—Leon Bambrick

**NAMING IS HARD. WORDS MATTER.**

# Equality & Mutual Respect

# ACTIVITY

- Two stickies.
- Leave them on the easel pad on your way out.
- One thing you've done in the past to reinforce the technical divide.
- One thing you've done in the past to bridge the technical divide.

Dig deeper:

- Diversity, Equity, and Inclusion
- Psychological Safety (5 Ideals of DevOps)
- Clean Language
- Nonviolent Communication

# EMPATHY

# empathy

1. Identification with or understanding of the thoughts, feelings, or emotional state of another person.
2. Capacity to understand another person's point of view or the result of such understanding.

# Understanding the programmers

Cognitive load and all the tech required

- Macintosh • VPN • GitHub • Bash • Git • VS Code • Docker
- Make • Rake • Redis • Oracle • Postgres • Ruby • Rails
- Javascript • React • Redux • CSS • Sass • HTML • Sequel • SQL
- Cucumber • JMeter • Rswag • RSpec • Minitest • RuboCop
- ESLint • Jest • Codecept • Cypress • Swagger • Insomnia • Curl
- Jenkins • AWS • ECS • SQS • S3 • CloudWatch • Splunk • New Relic • Kibana • HTTP • OAuth2 • NGINX • Regex • Flipper
- Graphviz • Markdown • AsciiDoc • Sidekiq • Elasticsearch • SSH
- Akamai CDN • Slack • Outlook • video conferencing solutions
- JIRA • Trello • VictorOps • Service Now

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  - Graphviz • Markdown • AsciiDoc • Sidekiq • Elasticsearch • SSH
  - Akamai CDN • Slack • Outlook • video conferencing solutions
  - JIRA • Trello • Jupyter • ServiceNow
- Application logic  
Business needs  
Partner systems  
Personas  
Stakeholders

• Macintosh • VPN • GitHub • Bash • Git • VS Code • Docker  
• Make • Rake • Redis • Oracle • Postgres • Ruby • Rails  
• Javascript • React • Redux • SASS • CSS • Sass • LESS • SCSS  
• Cucumber • Jest • RSpec • Minitest • RuboCop  
• ESLint • JSDT • Codecept • Cypress • Swagger • Insomnia • Curl  
• Jenkins • Travis CI • CircleCI • AppVeyor • CircleCI • Splunk • New Relic • Heroku • Node.js • OAuth2 • Nginx • Regex • Flagger  
• GraphQL • Markdown • ActiveRecord • Sidekiq • Elasticsearch • SSH  
• Akamai • CDN • Slack • Conference • Applications  
• JIRA • Trello • Asana • OpenProject • Redmine

# Values + Norms

# Business Needs

# Team Process

# DD, DOD, Stories

- Macintosh • VPN • GitHub • Bash • Git • VS Code • Docker
- Make • Rake • Redis • Oracle • Postgres • Ruby • Rails
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# **THE JOY OF CODE**

# THINKING VS. TYPING

+34,194 -17,318



~3 minutes

+62 -4



~3 hours

+1 -0



~3 days

# ACTIVITY

Find an 8-letter word, such that you can repeatedly remove a single letter and still have an English word.

4-letter word example:

- chat
- cat
- at
- a

## Answer:

- starting
- staring
- string
- sting
- sing
- sin
- in
- i





Estimates are horrific for puzzle-solving

# **FEEDBACK LOOPS**

Dig deeper:

- Simplicity & Locality (5 Ideals of DevOps)
- Automate
- Speed up feedback loops
- Improve the relevance of feedback loops
- Developer Experience (DX)

# CURIOSITY

curiosity

1. the tendency to ask and learn about things by asking questions, investigating, or exploring.

Don't be afraid

Look at the code and ask about it

# ACTIVITY

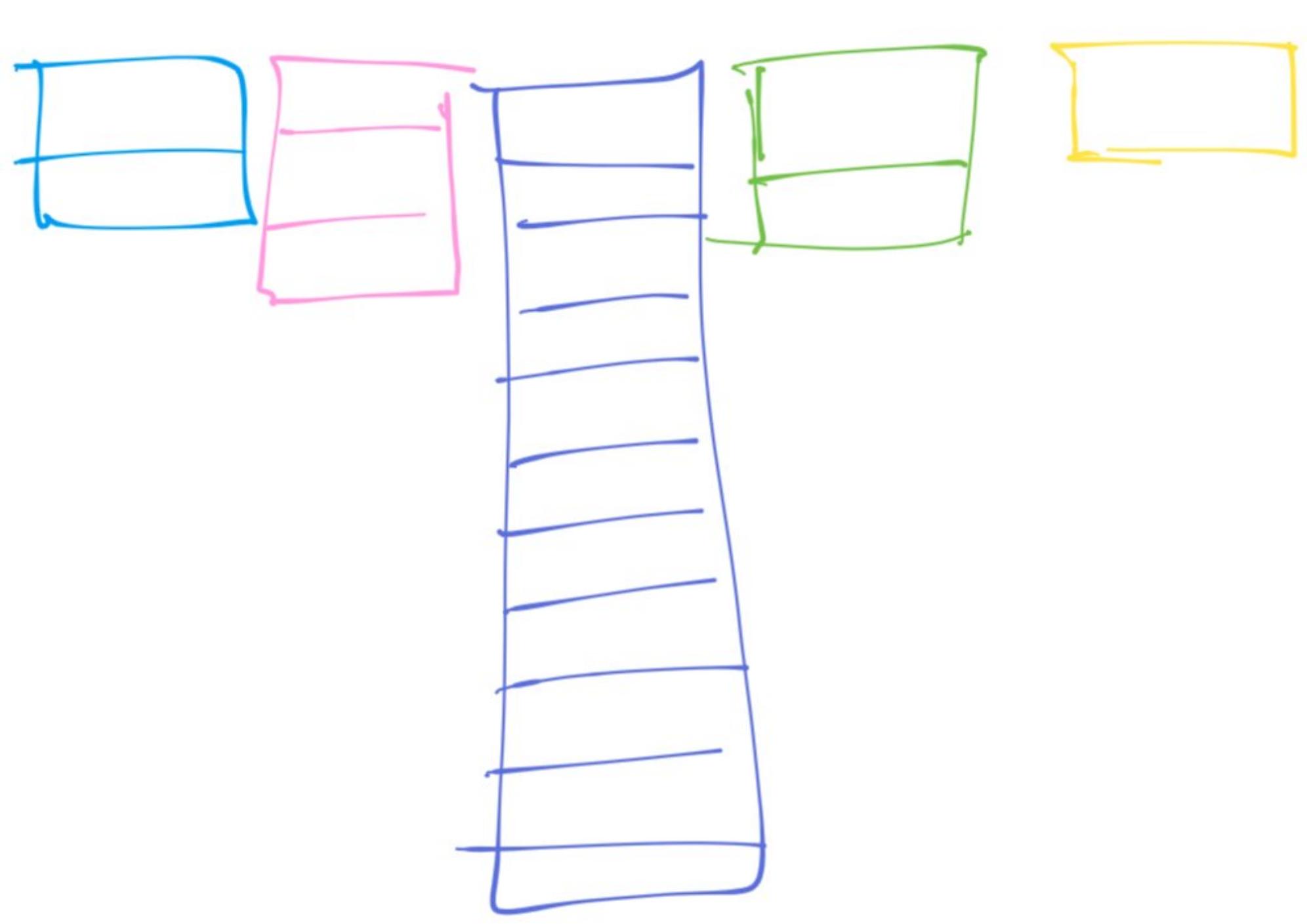
Read some code.

Compare with the second version.

Check out the output.

Spot the bug.

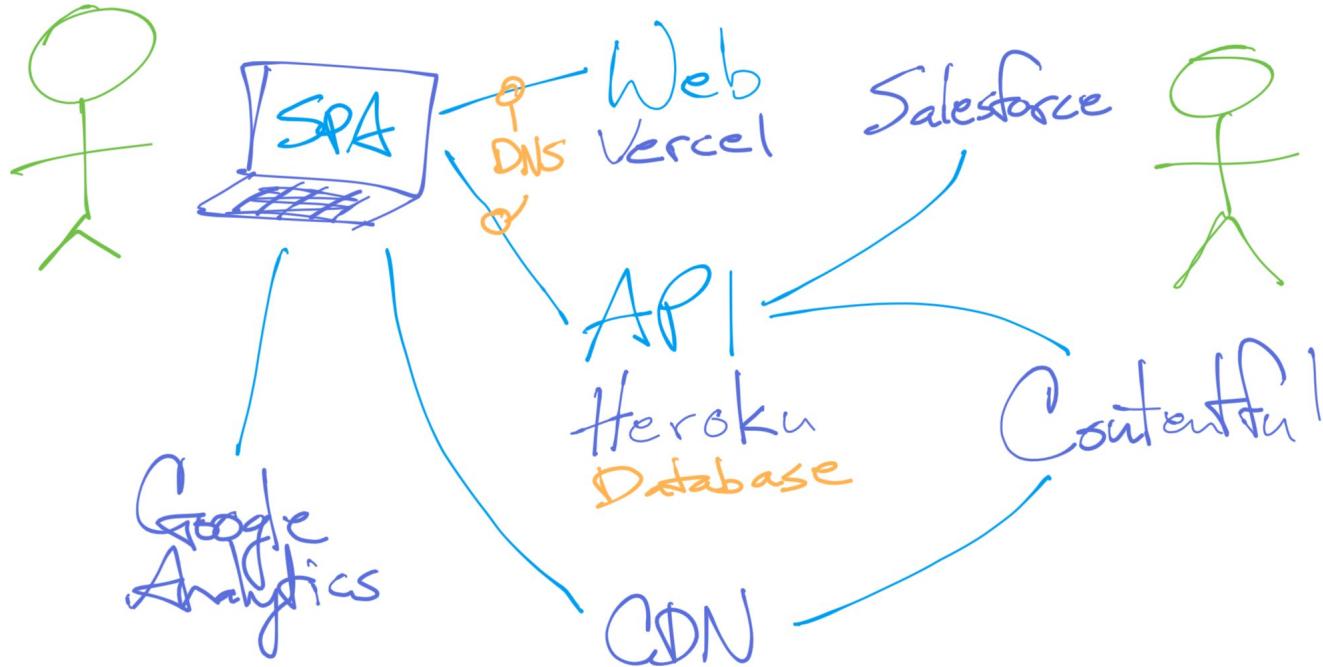
Which version of the code would be easier to  
change?



# Layers

- ...
- Human-Machine Interaction
- System Behavior
- Application Code
- Framework & Dependencies
- Programming Language
- Machine Language
- Instruction Set Architecture
- Microarchitecture
- Logic Gates
- Transistors
- Physics

Learn to draw the architecture



Dig deeper:

- Observe (Gemba Walks)
- Figure out enough to write markdown on GitHub
- Keep learning
- Try to code a little?

# ADVOCACY

## advocacy

1. The act of arguing in favour of, or supporting someone or something.
2. The practice of supporting someone to make their voice heard.

Value



# THE MODERNIZATION STORY

Time

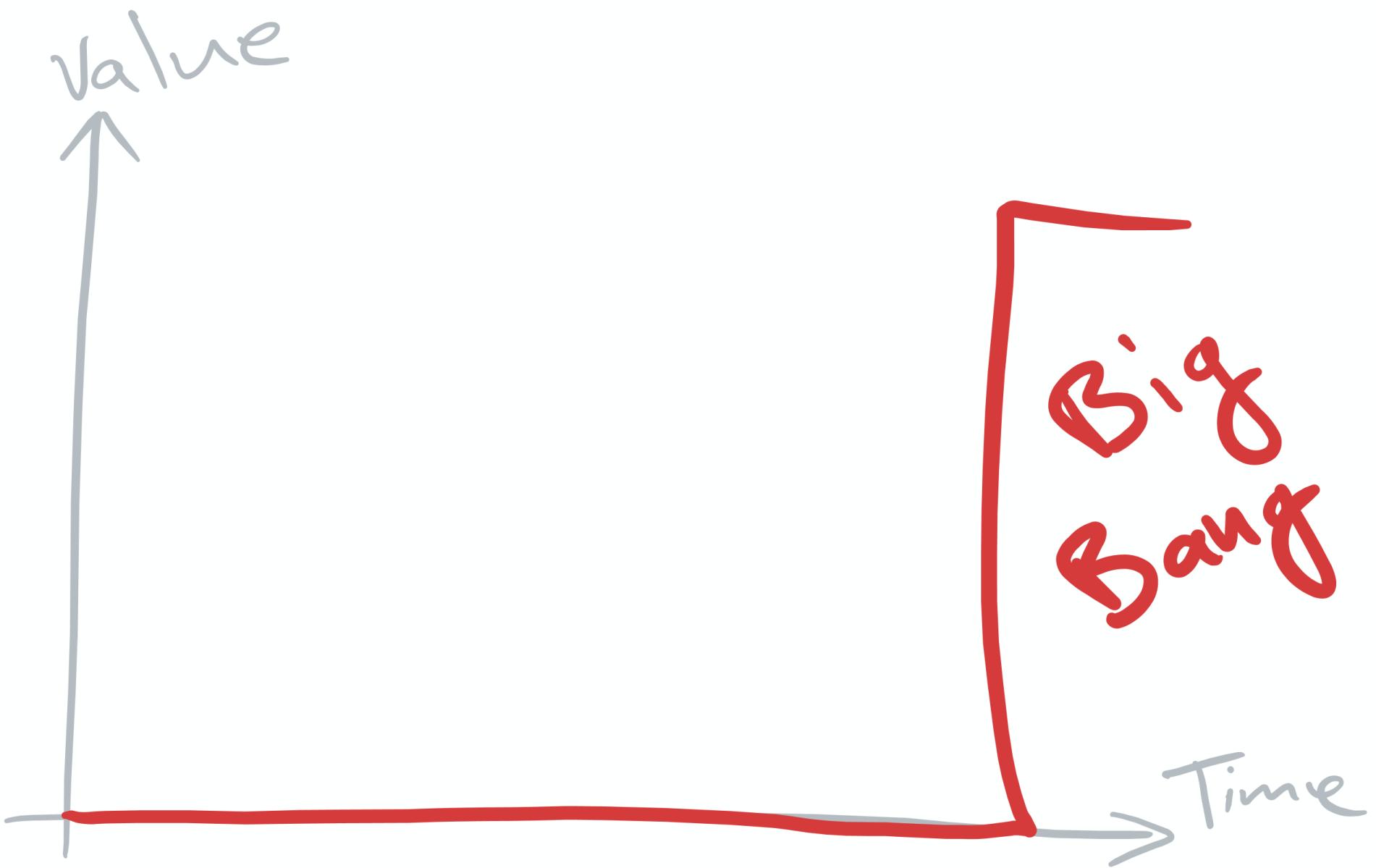


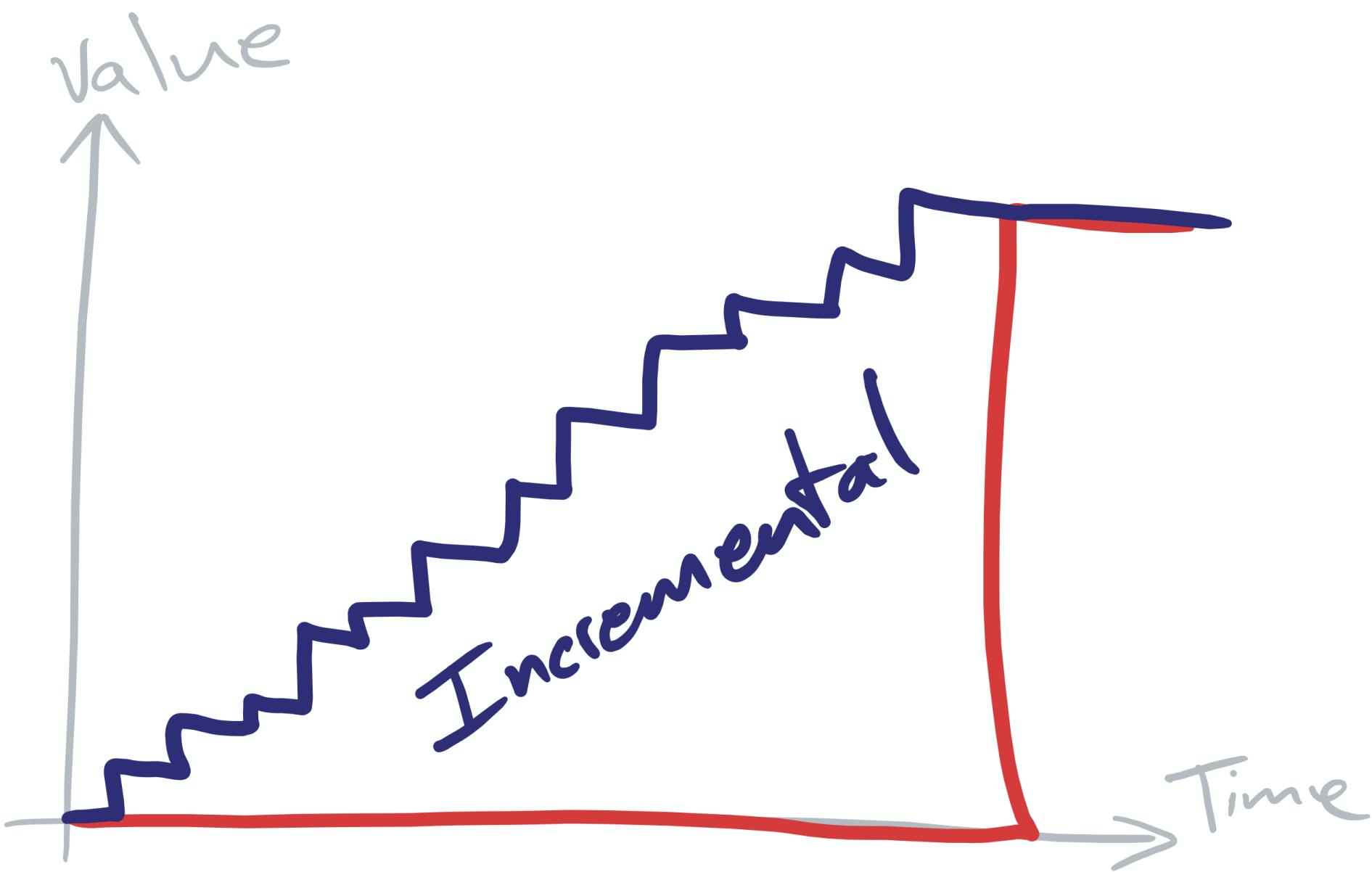
Value

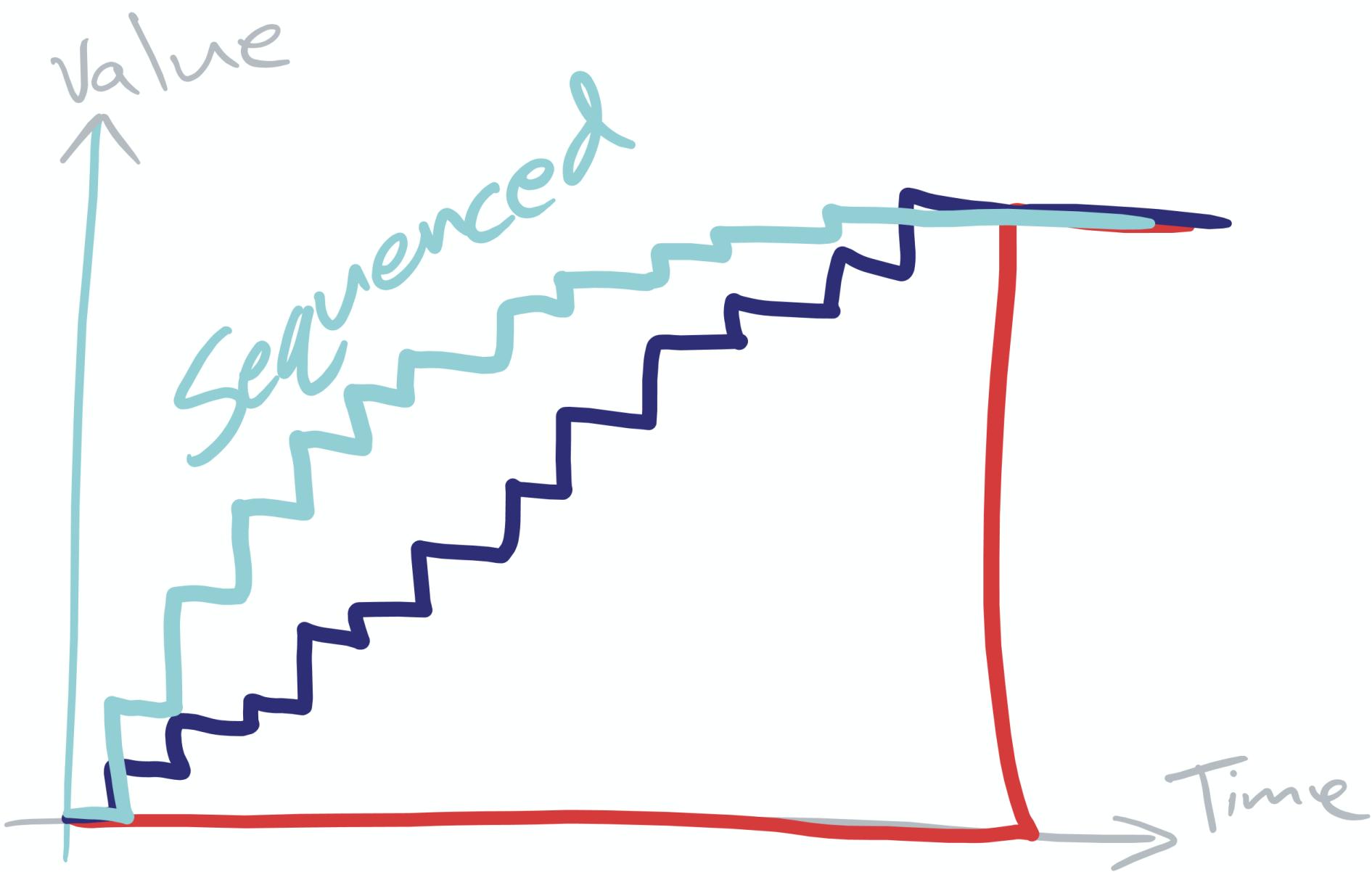


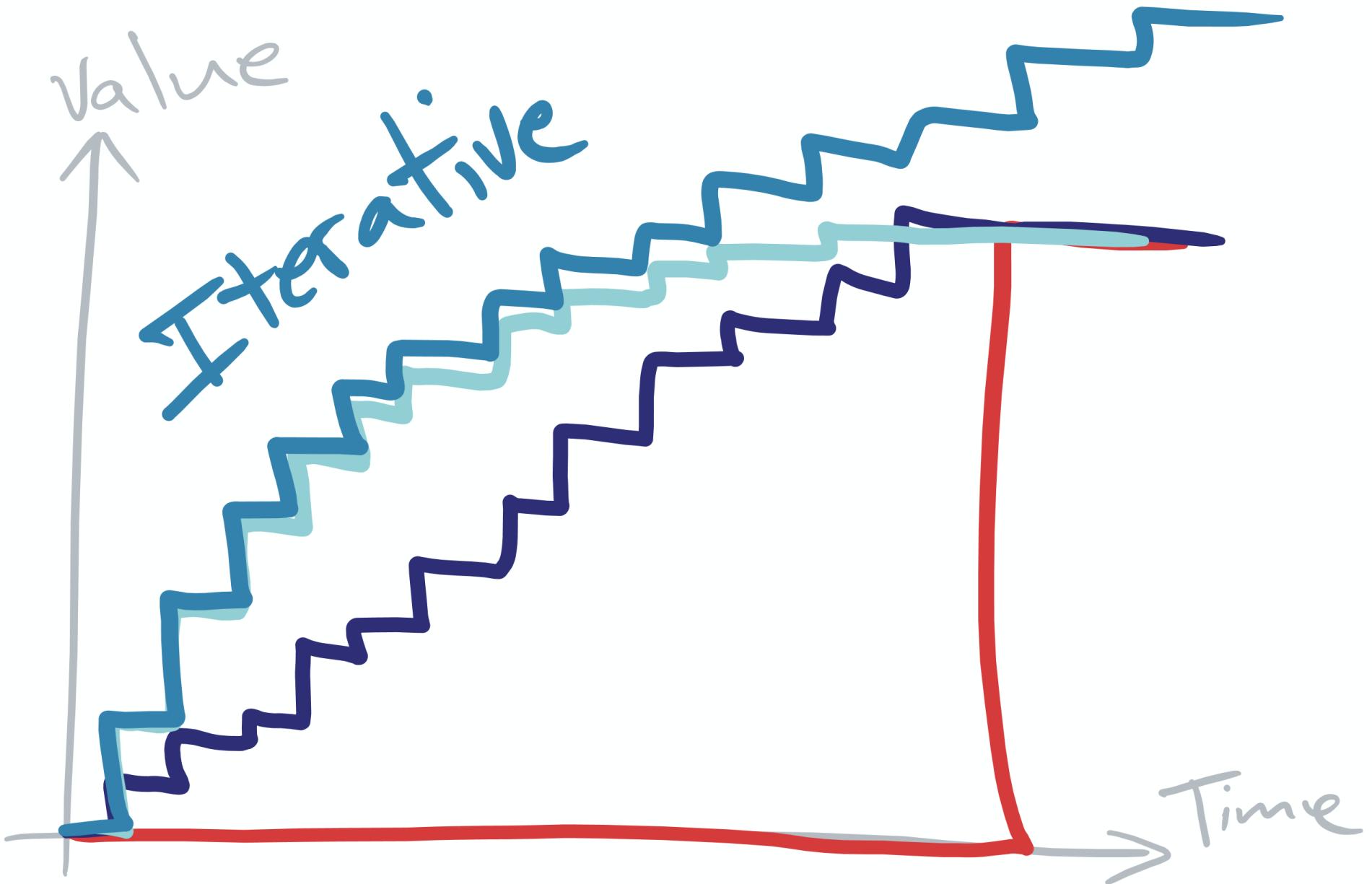
Time











Value



Time

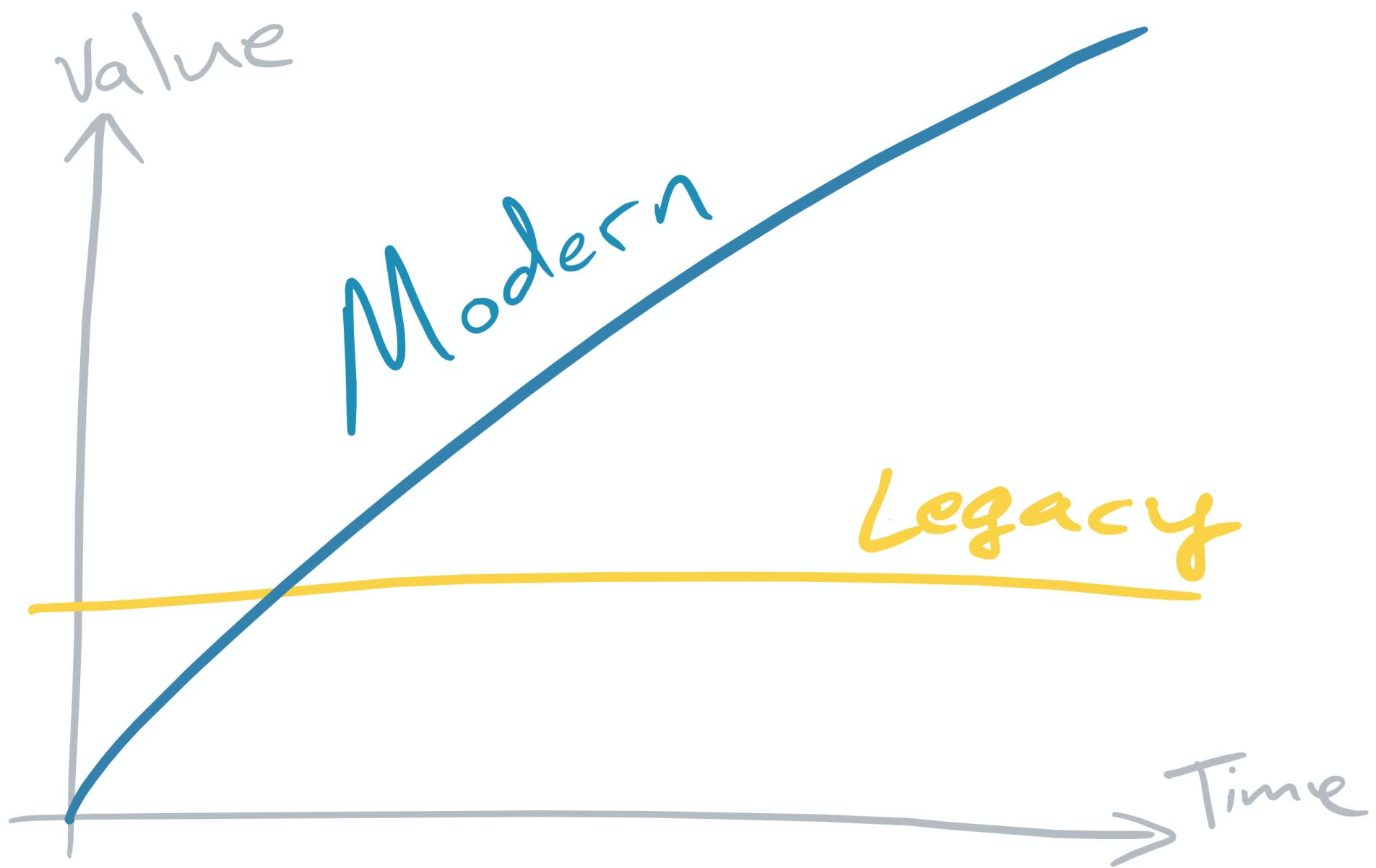


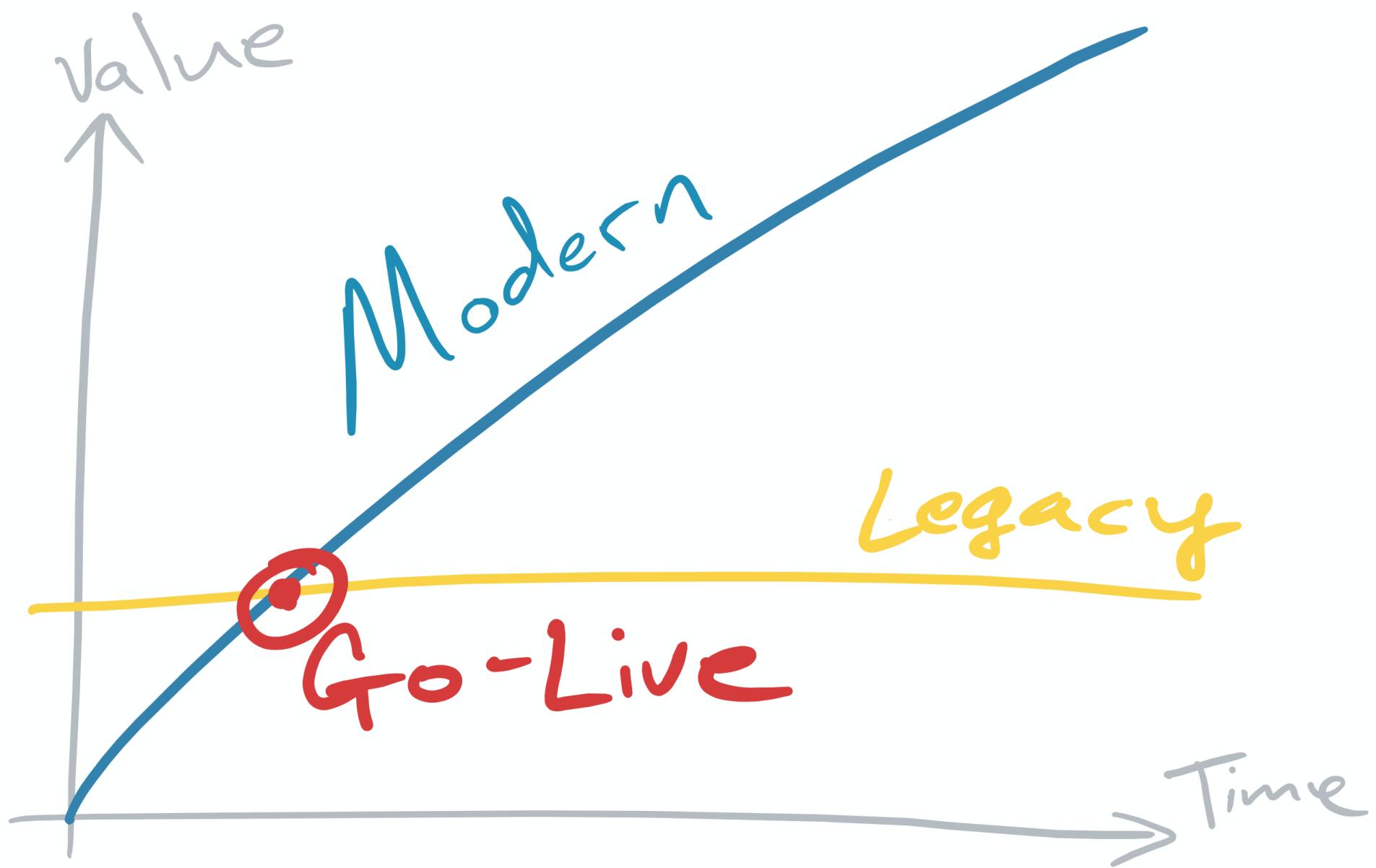
Value

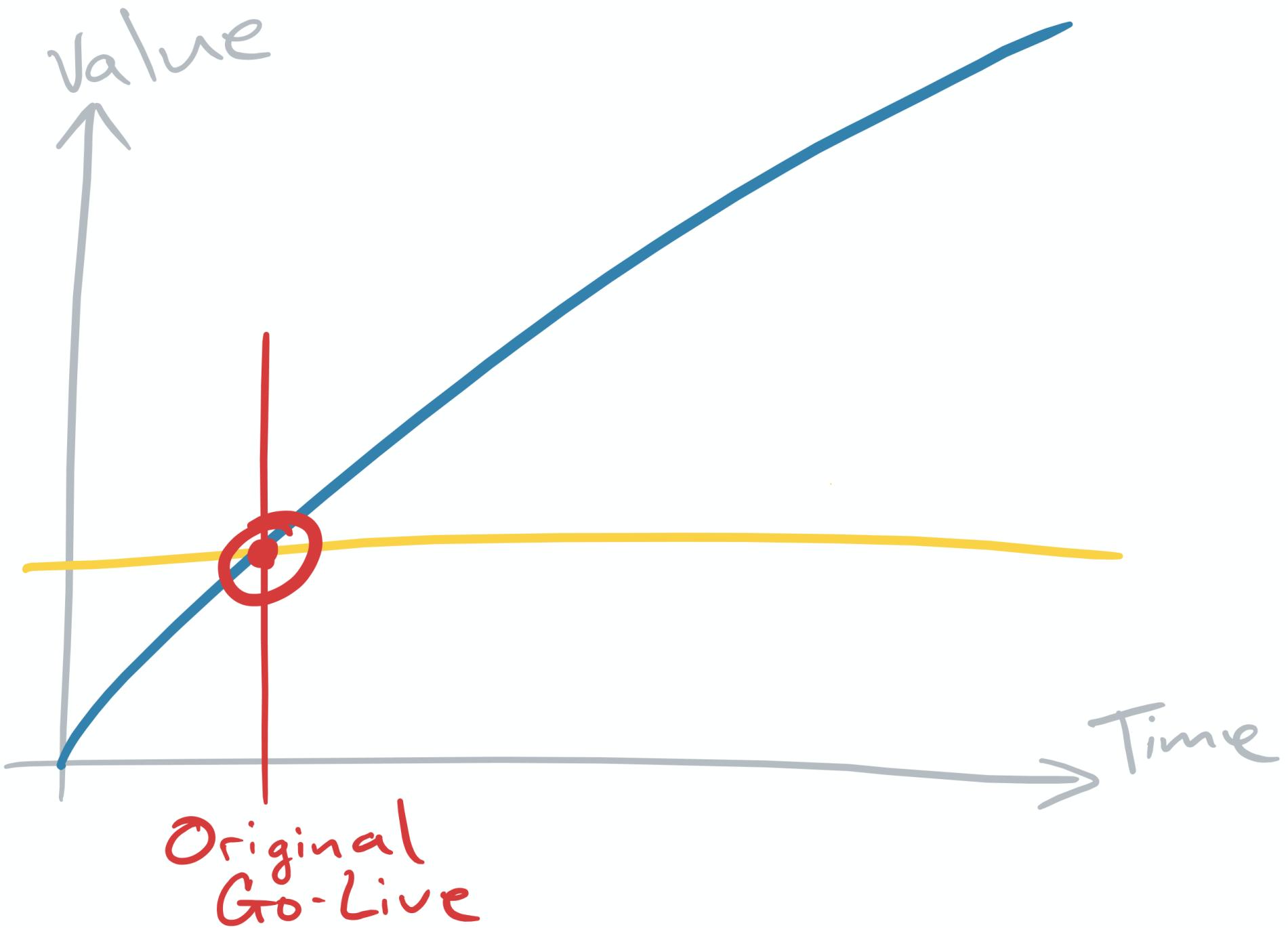


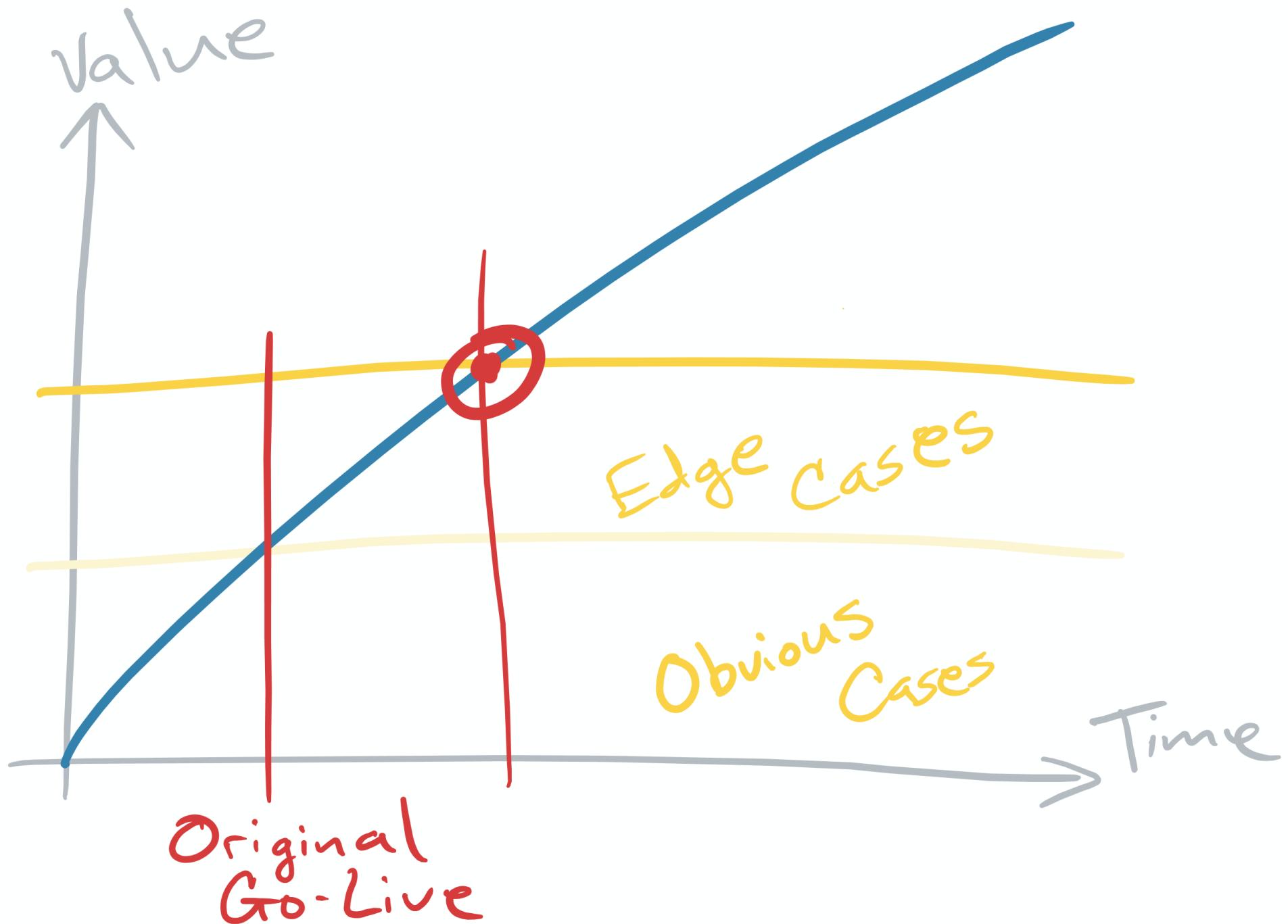
Legacy

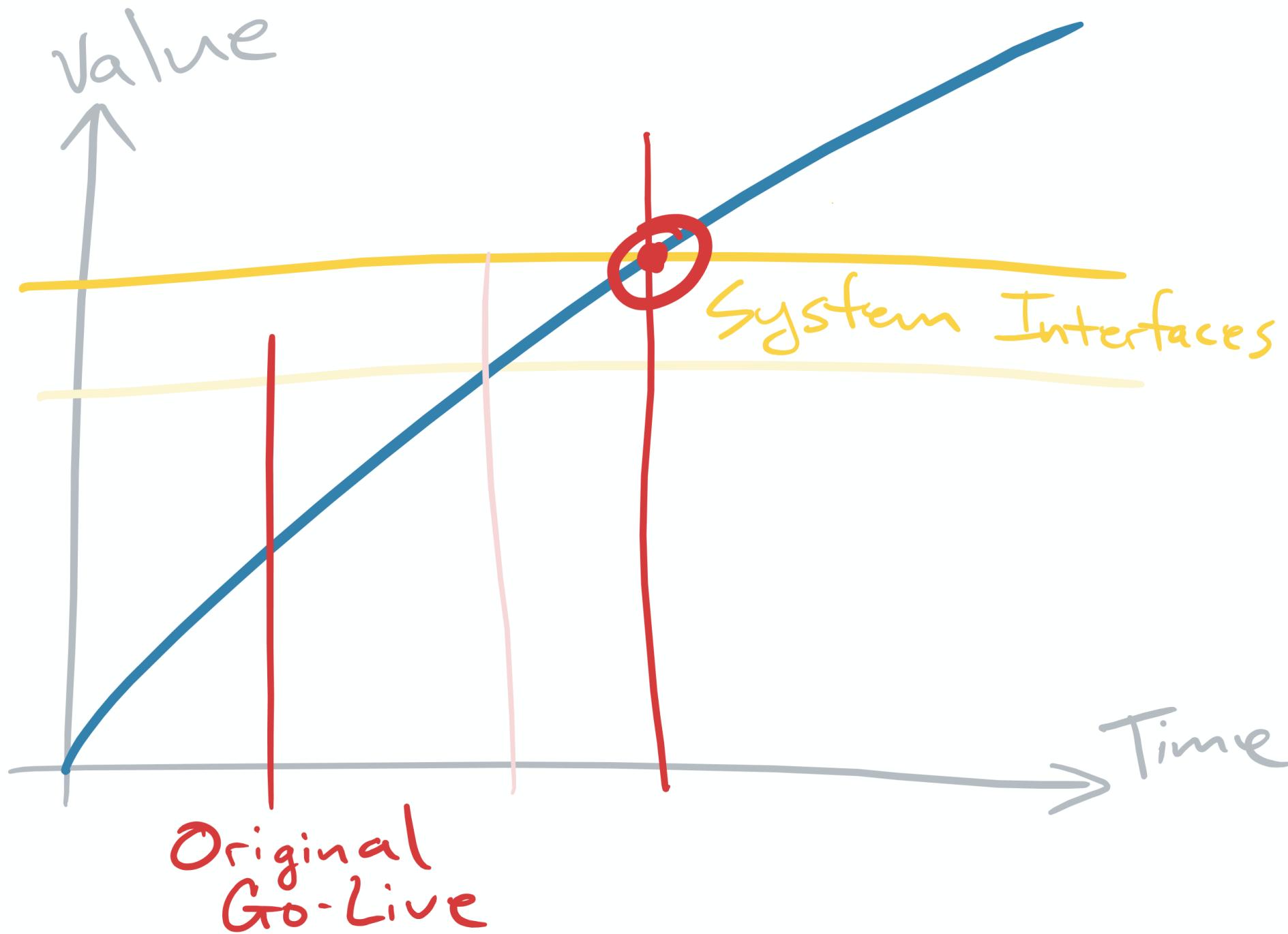


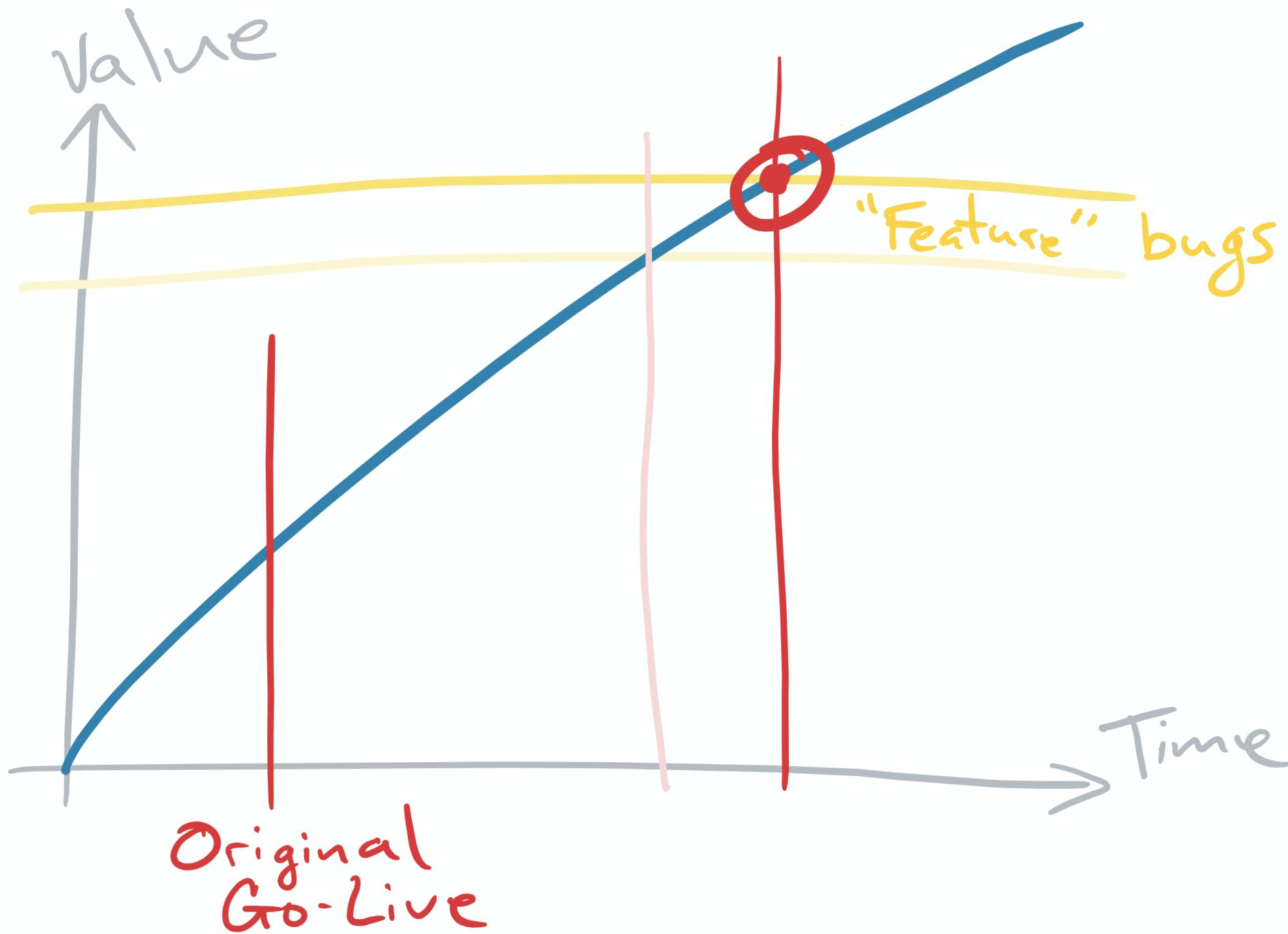


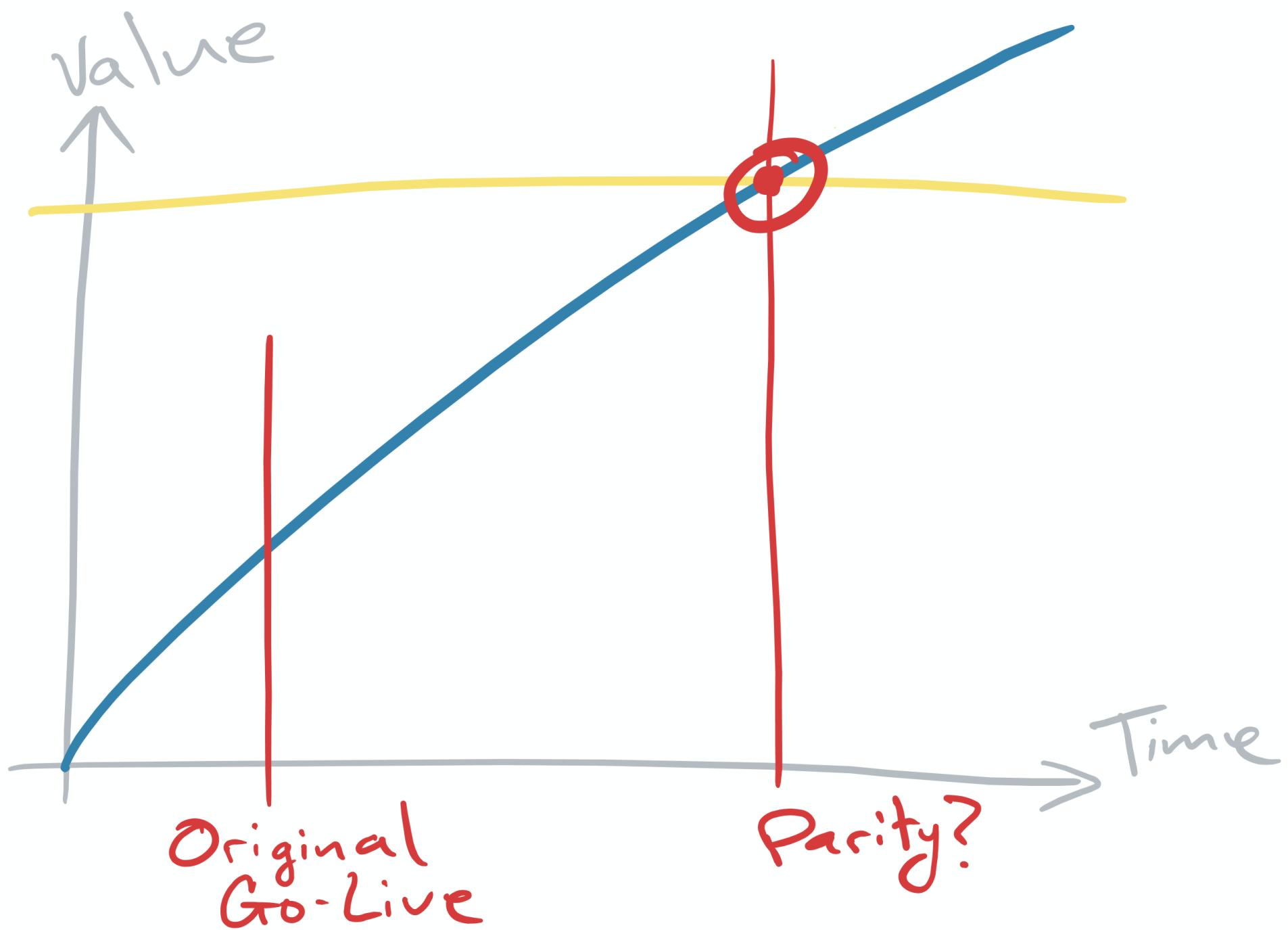


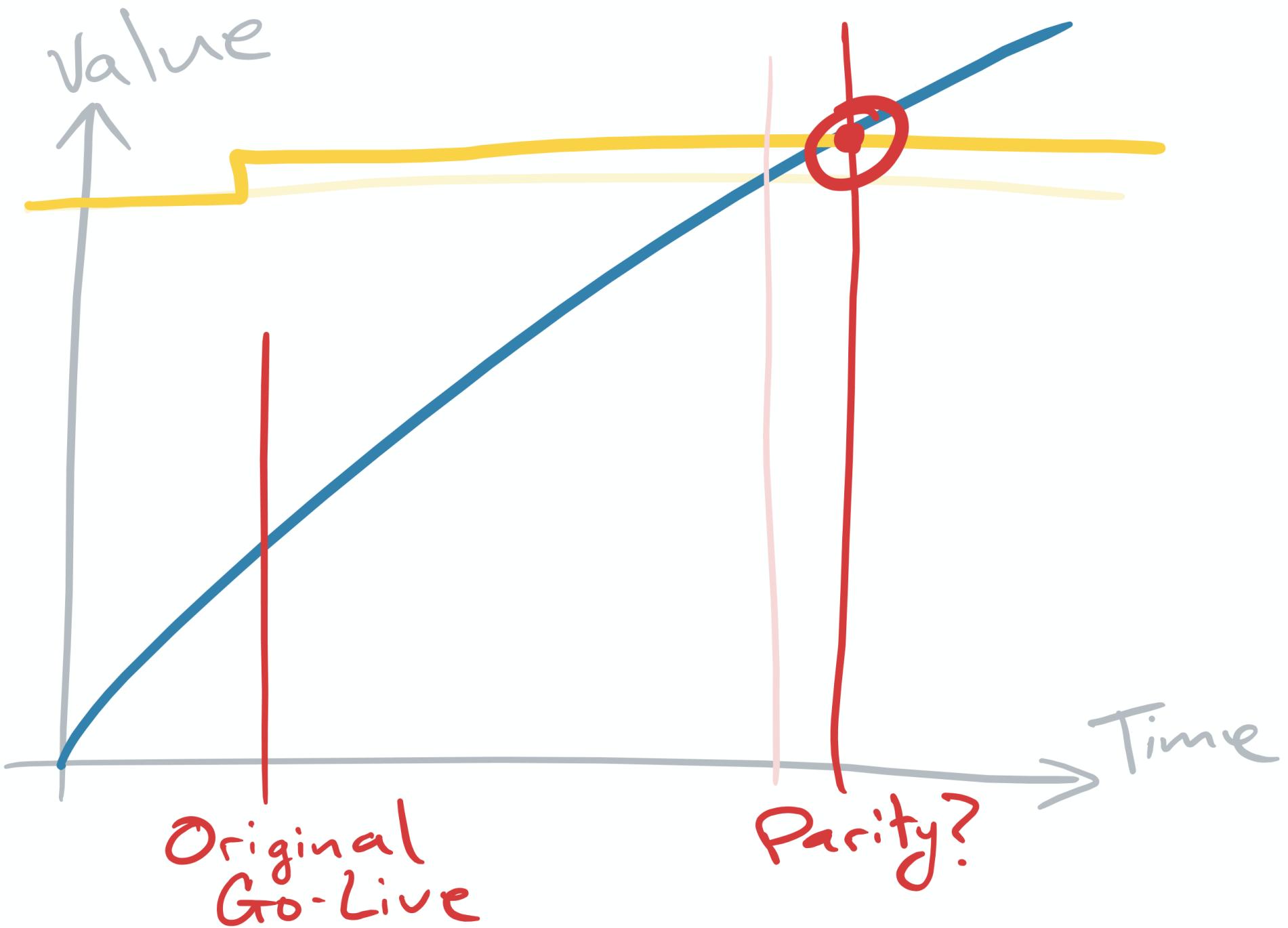


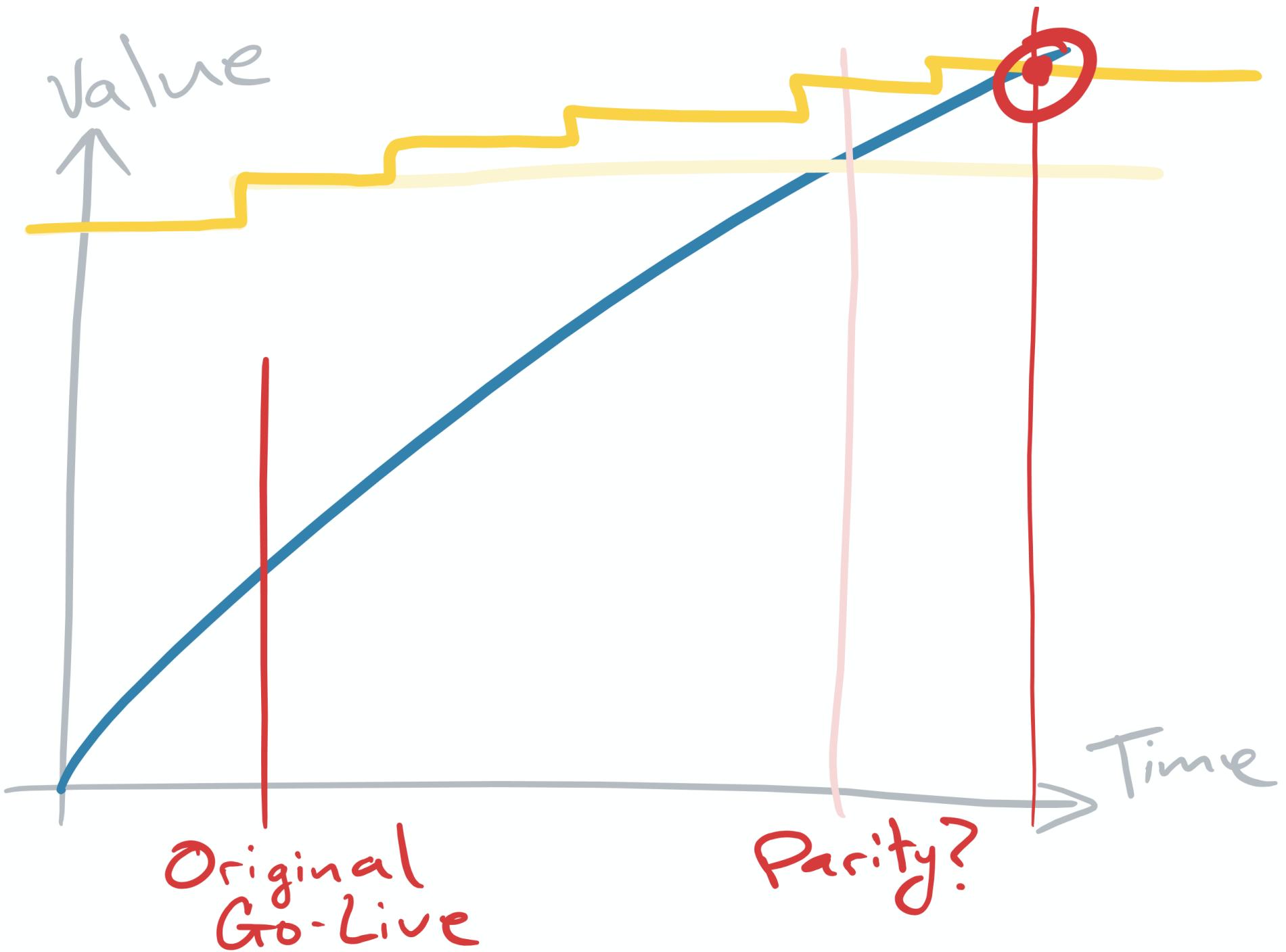


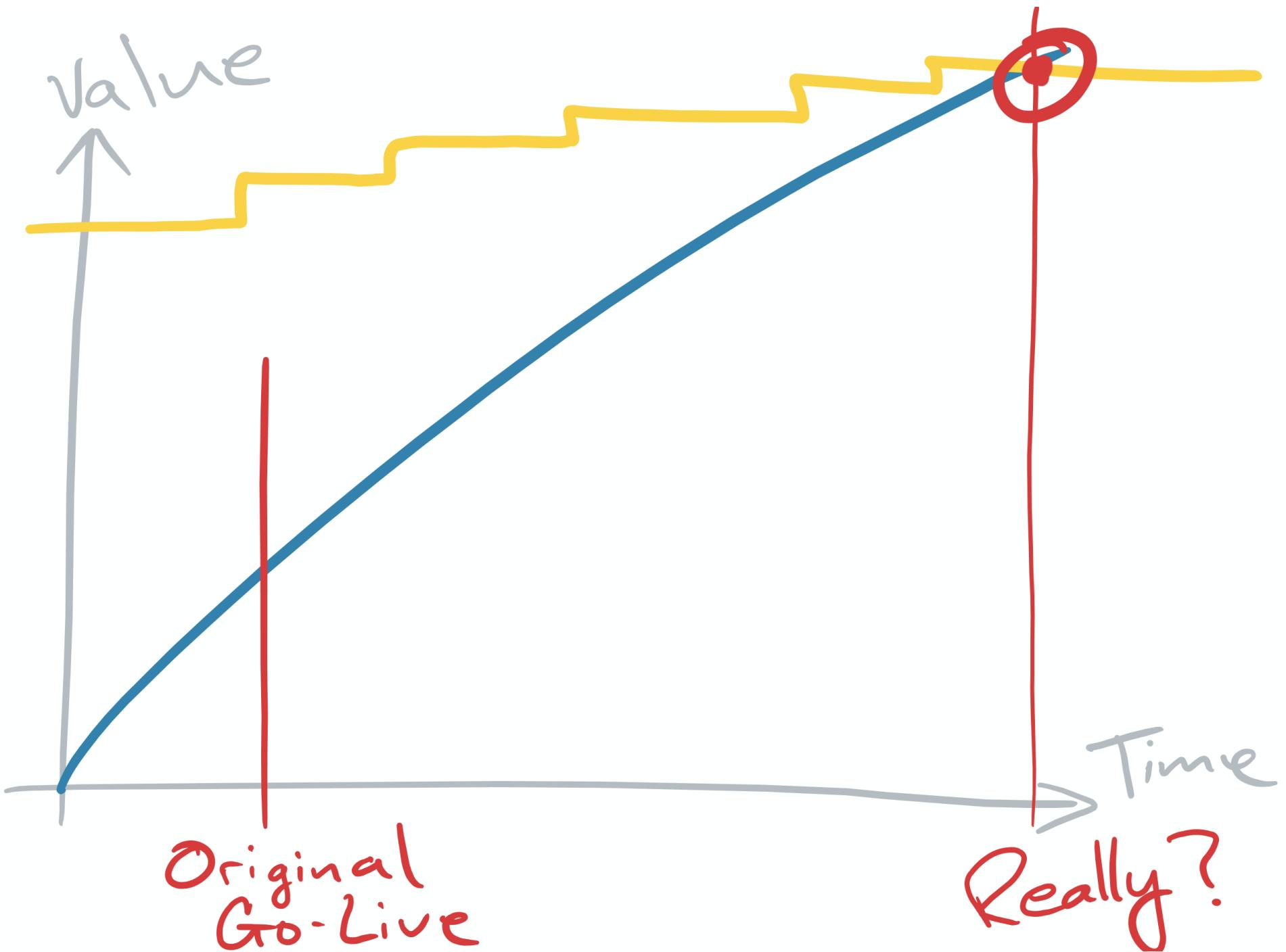


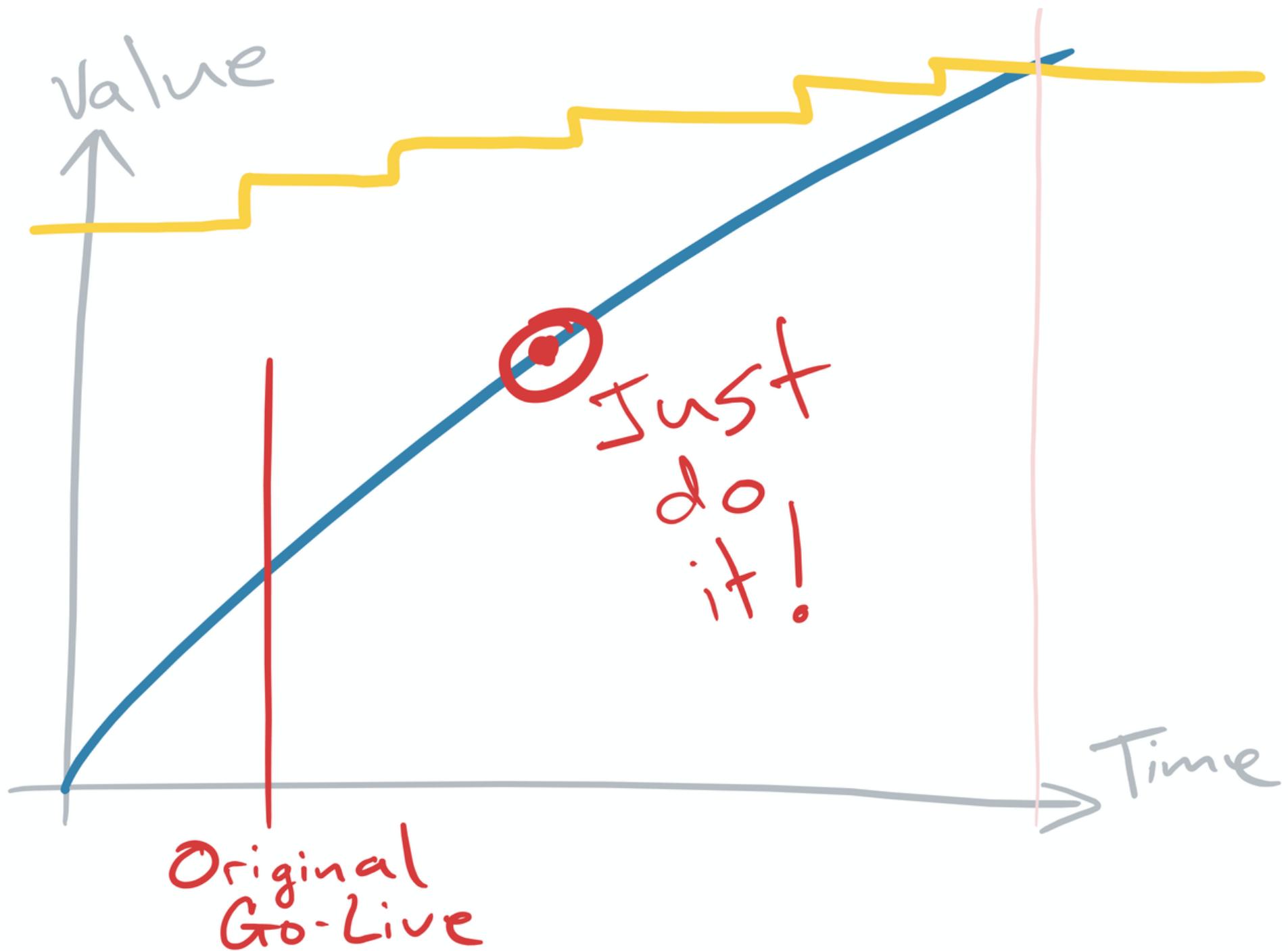


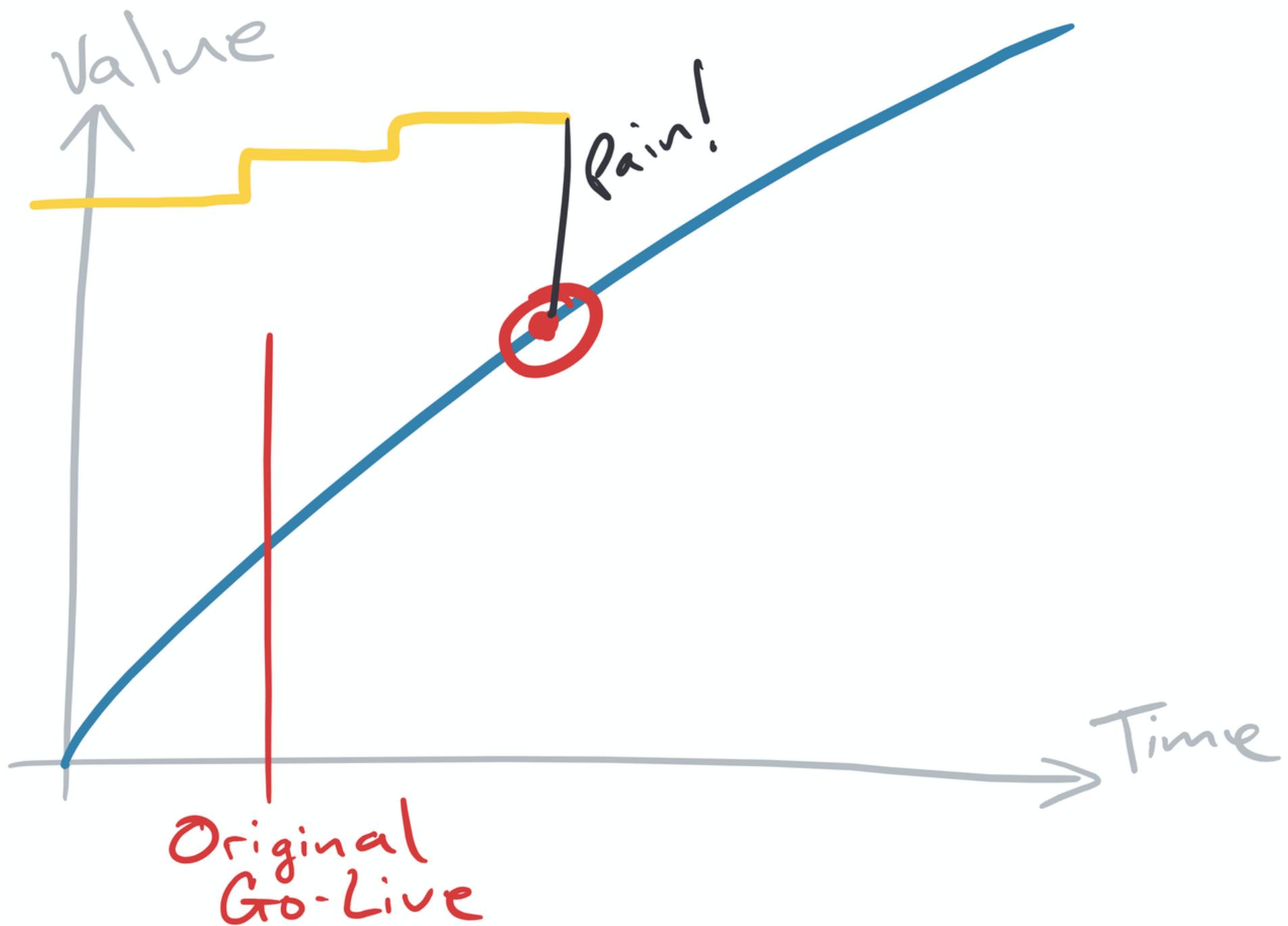


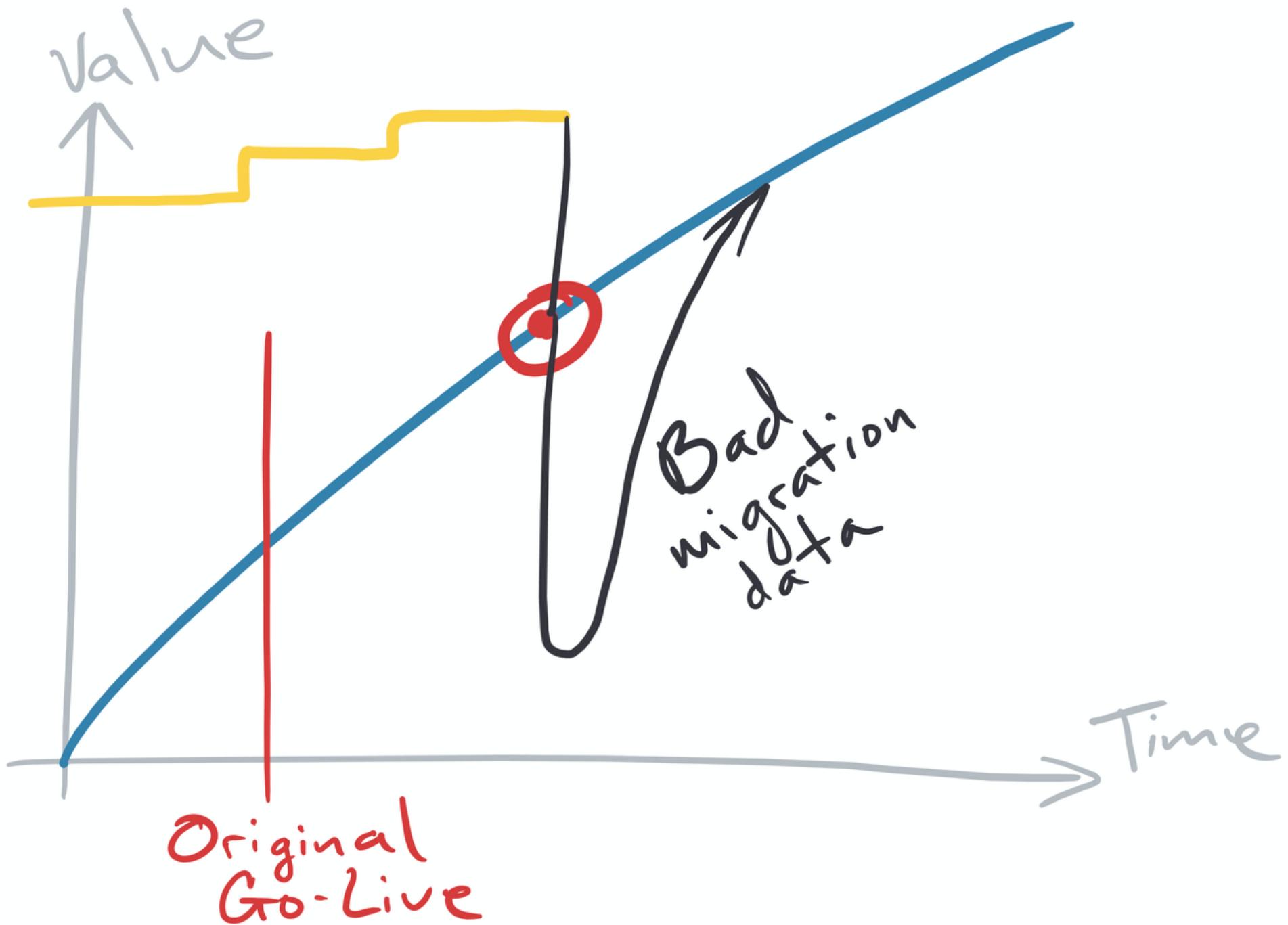












instead

*All models are wrong,  
but some are useful*

—George Box



- Repair
- Maintain
- Remodel

Continuous Modernization™

Do more, faster

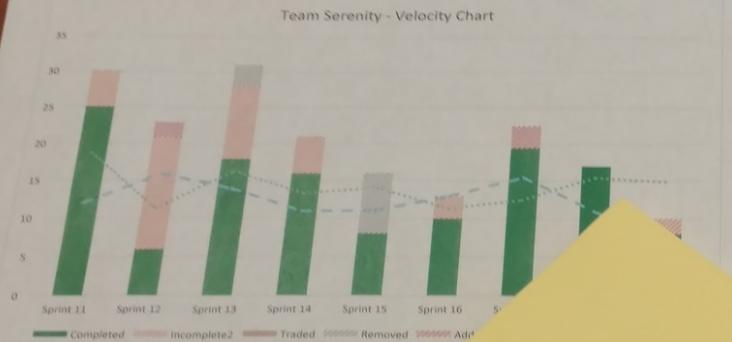
# METRICS DRAW ATTENTION

~~Flow metrics:~~

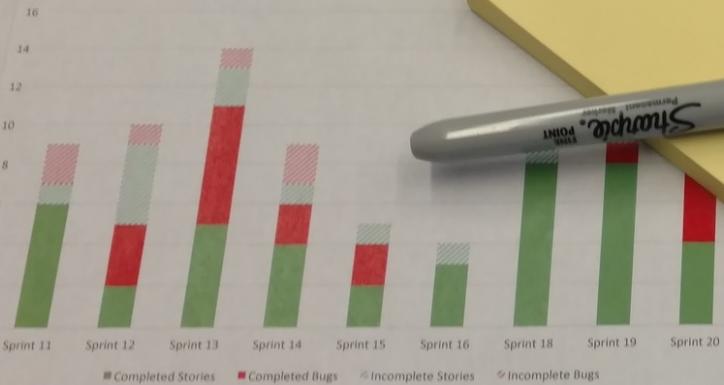
"More, faster" metrics:

- Velocity
- Cycle Time
- Deadlines

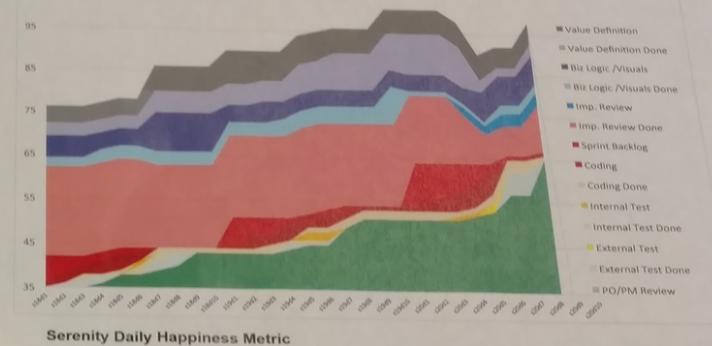
Serenity Sprint 20 Retro



Team Serenity - Completed Issues



Team Serenity - Cumulative Flow Diagram



Serenity Daily Happiness Metric



## Morale metrics:

- Niko niko
- Employee Net Promoter Score (NPS)
- Engagement and enablement surveys

# SERENITY

My Happiness Metric

**Blue** - Moderately happy

or better

**Green** - Not bad

**Yellow** - Not great

**Red** - Bad

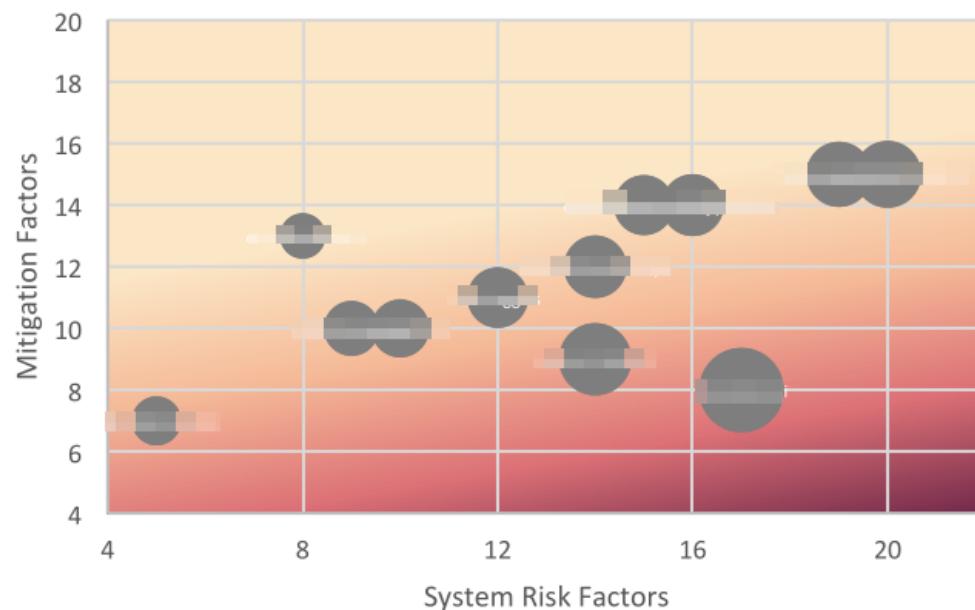
(such as complete failure, major frustration, or success being outside your control)



## Code quality metrics:

- Count of TODO comments in the code
- Code smells
- Test coverage

**Risk Map**



**Maximum Risk Score:**  
**10.6**

1 week ago 10.6

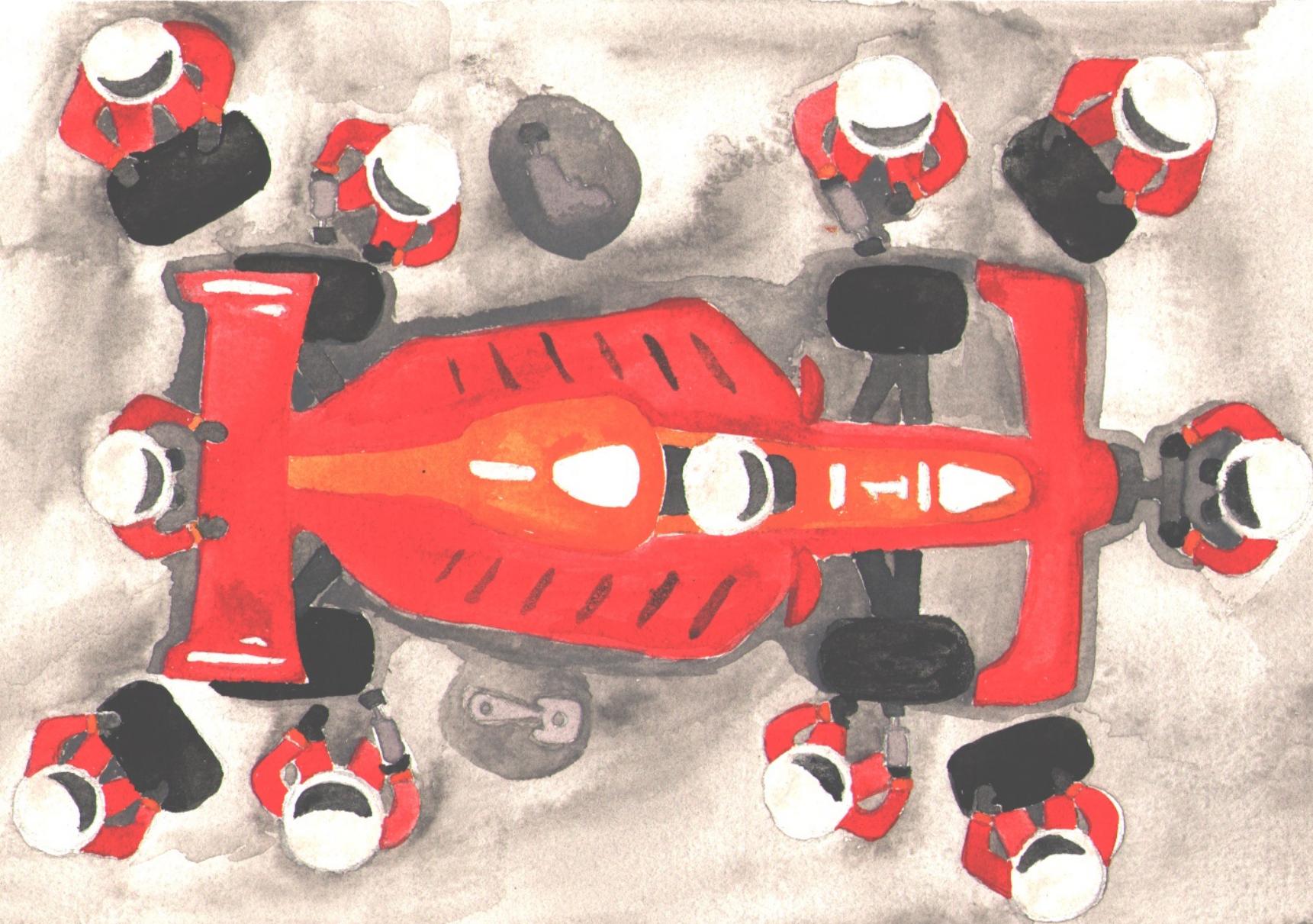
5 weeks ago 10.6

Report Date: 10/14/18

Microservice	Risk Score	Mitigation	Testing	Monitoring	Logging	Alerting
[REDACTED]	10.6	25%	2	2	1	3
[REDACTED]	7.8	31%	3	3	2	1
[REDACTED]	6.7	69%	4	4	4	3
[REDACTED]	6.3	69%	4	4	4	3
[REDACTED]	5.8	50%	3	3	3	3
[REDACTED]	5.7	63%	4	3	4	3
[REDACTED]	5.5	44%	3	3	2	3
[REDACTED]	5.4	63%	4	3	4	3
[REDACTED]	5.0	38%	2	3	2	3
[REDACTED]	4.5	38%	1	3	3	3
[REDACTED]	3.6	19%	2	2	2	1
[REDACTED]	3.1	56%	4	3	3	3

*Balance out metrics that focus on  
"more, faster!" with ones that focus on  
morale and on code quality.*

– Dane Weber, this presentation

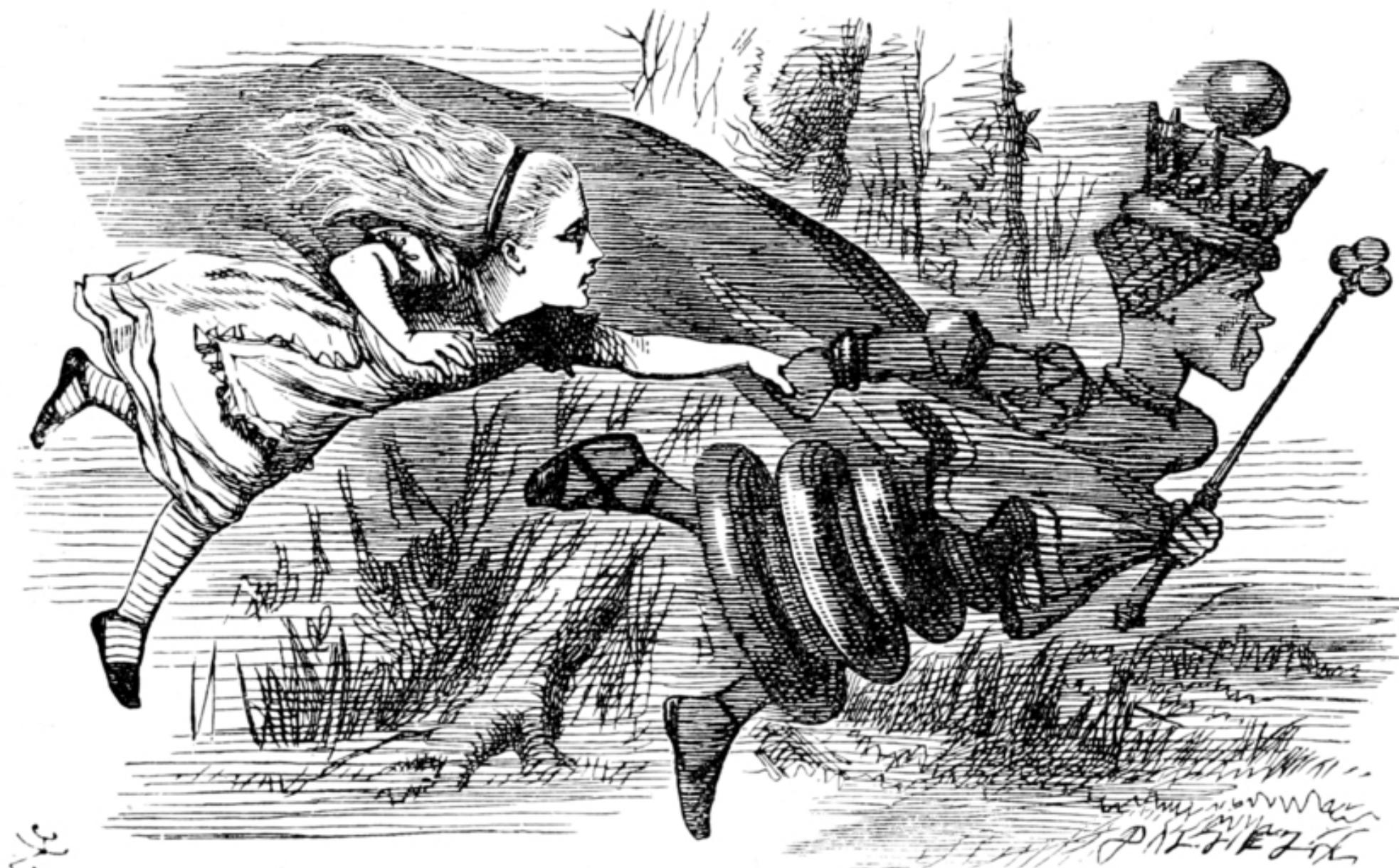


- 
- Driver
  - Trainer
  - Mechanic
  - Data Analysts
  - Strategists
  - Track Team
  - Designers
  - Simulation Team
  - Manufacturing Team
  - *more!*

Software is weird.

# Software is weird.

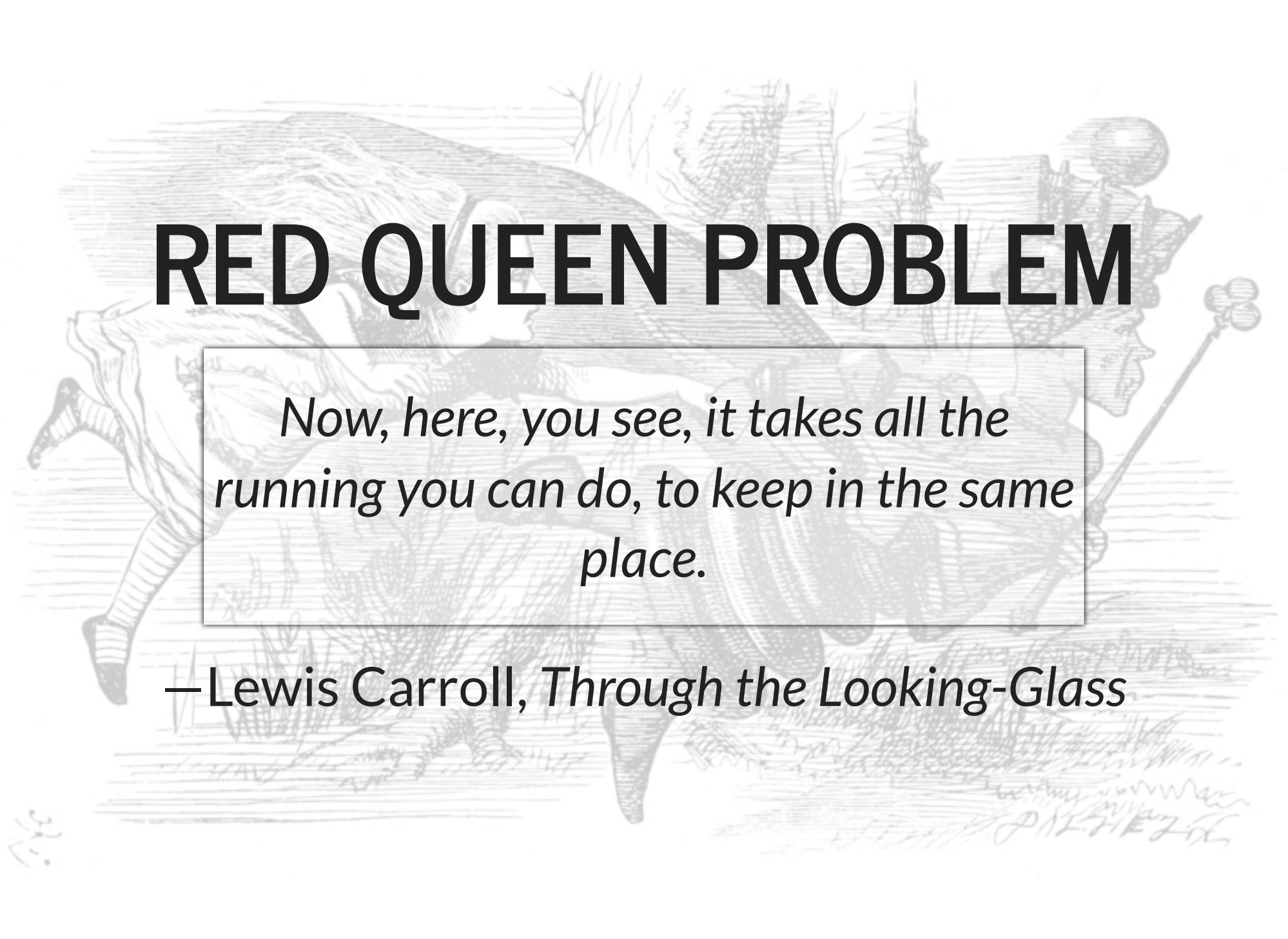
1. The code is great.
2. Everything else changes.
3. The code is unchanged.
4. The code is now broken or useless.



• 16

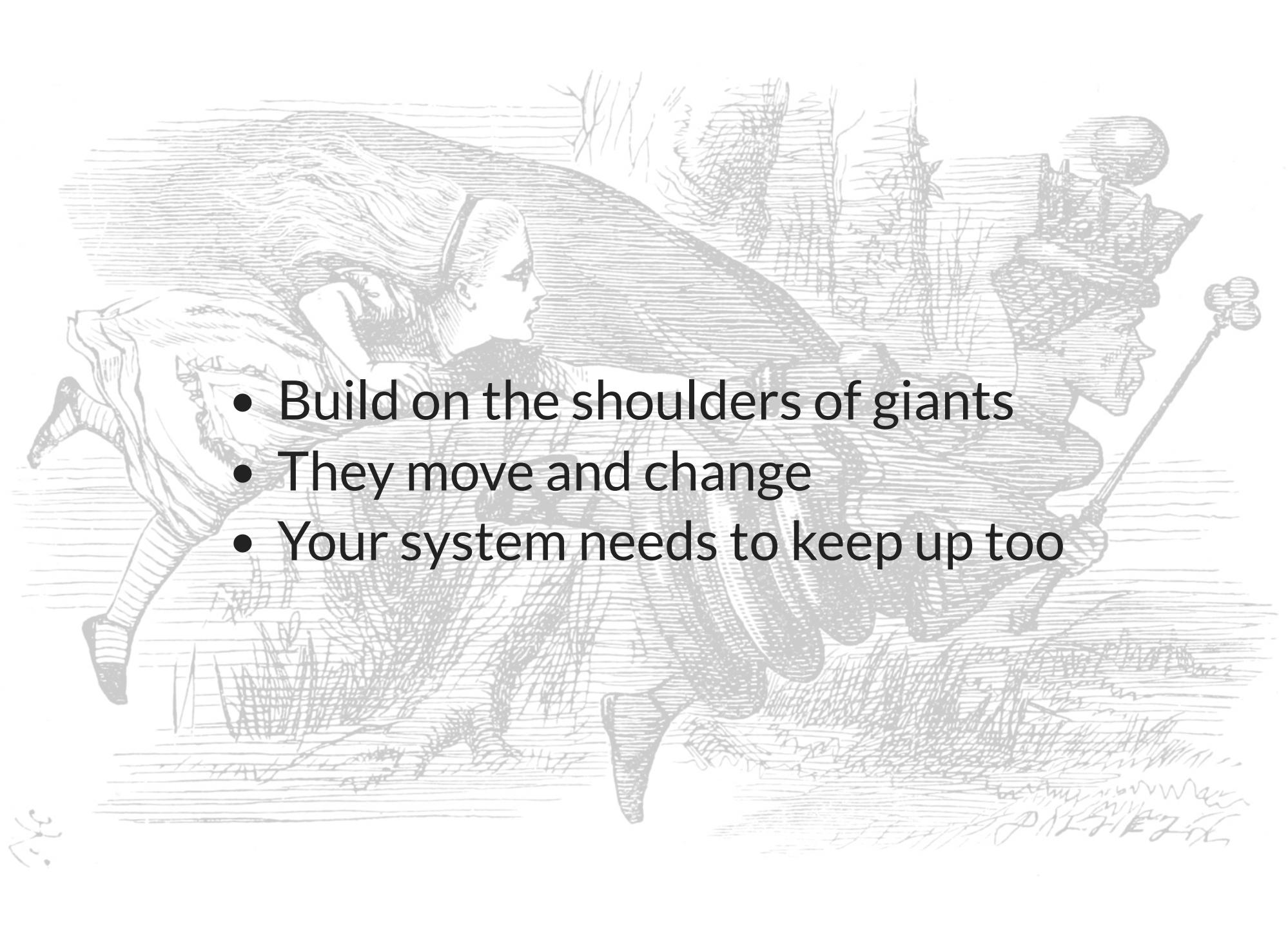
WINTER  
PICTURES

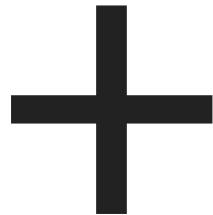
# RED QUEEN PROBLEM



*Now, here, you see, it takes all the  
running you can do, to keep in the same  
place.*

—Lewis Carroll, *Through the Looking-Glass*

- 
- Build on the shoulders of giants
  - They move and change
  - Your system needs to keep up too



- Sewage has a new pipe size
- We need ethernet in the walls
- Mobility pods require a landing pad

# ACTIVITY

Discussions in groups of 3-4.

Who currently advocates for improving technical practices, quality, and automation on your team?

Dig deeper:

- Testing (so many kinds!)
- Automation for team happiness
- Focus, Flow, and Joy (5 Ideals of DevOps)
- Customer Focus (also 5 Ideals of DevOps)

# CHALLENGE

challenge

1. a dare
2. a difficult task

*No matter how it looks at first, it's  
always a people problem.*

—Gerald M. Weinberg, *Quality Software Management: Systems Thinking*

*Software projects are people projects.*

– Dane Weber, this presentation

Take your place in the mob (ensemble)



~~Pair programming~~  
Pairing

*Programs must be written for people to  
read, and only incidentally for  
machines to execute.*

—Harold Abelson, Gerald Jay Sussman, and Julie Sussman, *Structure and Interpretation of Computer Programs*

Code is for people.  
Is it readable?

# Developer Experience (DX)

## Who are the tests for?

- The team?
- The customer?
- Someone else?
- Are they providing confidence?
- Are they providing critique and insight?

Tests are not an end in themselves.

## Bonus:

```
Given I am presenting with reveal.js
And my deck has more slides remaining
When I press the spacebar
Then the next slide is shown
```

Dig deeper:

- Improvement of Daily Work (5 Ideals of DevOps)
- Agile Testing Quadrants
- Mobbing, mobbing, mobbing!
- FAST Agile

# ACTIVITY

Please challenge me.

In addition to the conference's feedback form,  
please write one each:

- Something you thought really mattered. (plus)
- A way you think I could improve this. (delta)



Please leave these on the other easel.

# The Undercover Scrum Master Returns

<https://daneweber.github.io/presentations/TheUndercoverScrumMasterReturns/>

- Collegiality
- Empathy
- Curiosity
- Advocacy
- Challenge

**Dane Weber** [daneweber.com](http://daneweber.com)



On your way out:

- Plus and Delta
- Technical divide examples from earlier.



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