# Best Practices of Agile teams

•••

v2.0.3

**Today:**
Which practices separate great Scrum teams from others?

Top 9 things the best Scrum teams get right every time!

Today:
Which practices separate great Scrum teams from others?

You won't believe nr. 7!!

# Practicalities

A barely organized list of good things to do.

Not actually a Scrum talk; it's just common.

Questions welcome.

QR-code for slides at the end

# Who am I

Jakob Buis

~~Developer~~
~~Team lead~~
~~Engineering Manager~~
Management consultant

Professional team builder

# Should you listen to me?

## Yes, because:

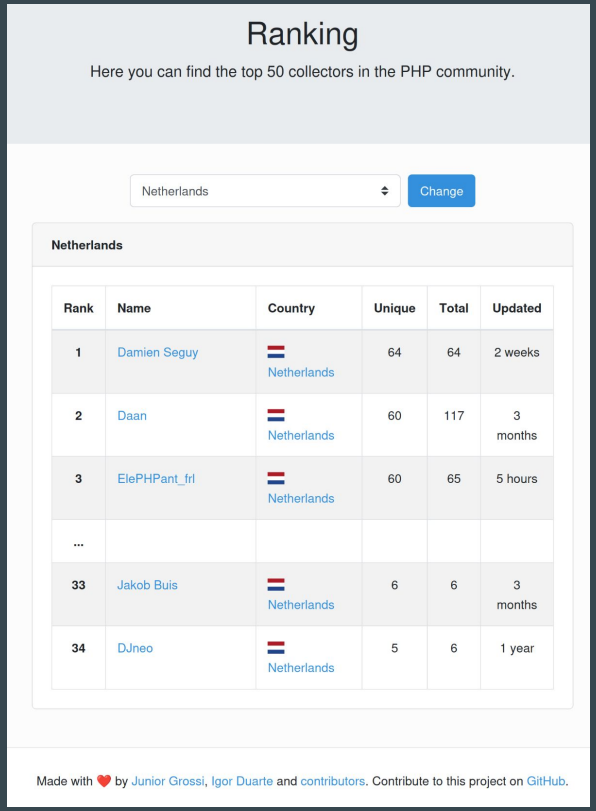
Never been fired

Herd of 6 elePHPants

Worked with 15+ Scrum teams in various companies & industries

As a developer, manager and Scrum Master

Professional Scrum Master II




elephpant.me

# Should you listen to me?

## Yes, because:

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Worked with 15+ Scrum teams in various companies & industries

As a developer, manager and Scrum Master

Professional Scrum Master II

## No, because:

I fuck up, a lot

Worked with 16 teams

Mostly in smaller companies
(< 300 people, < 30 engineers)

Most of my ideas come from other people
(links included!)

# Understanding Scrum

Daily Scrum

Definition of Done

Developer

Empiricism

Increment

Product Backlog

Product Goal

Product Owner

Sprint

Sprint Backlog

Sprint Goal

Sprint Planning

Sprint Retrospective

Sprint Review

Technical debt

1

# Experiment beyond Scrum
# not before Scrum

# THE SCRUM Police

Daily Scrum on Mon & Wed
Demo work not completed
Retrospective every 3rd sprint

Daily Scrum on Mon & Wed
Demo work not completed
Retrospective every 3rd sprint

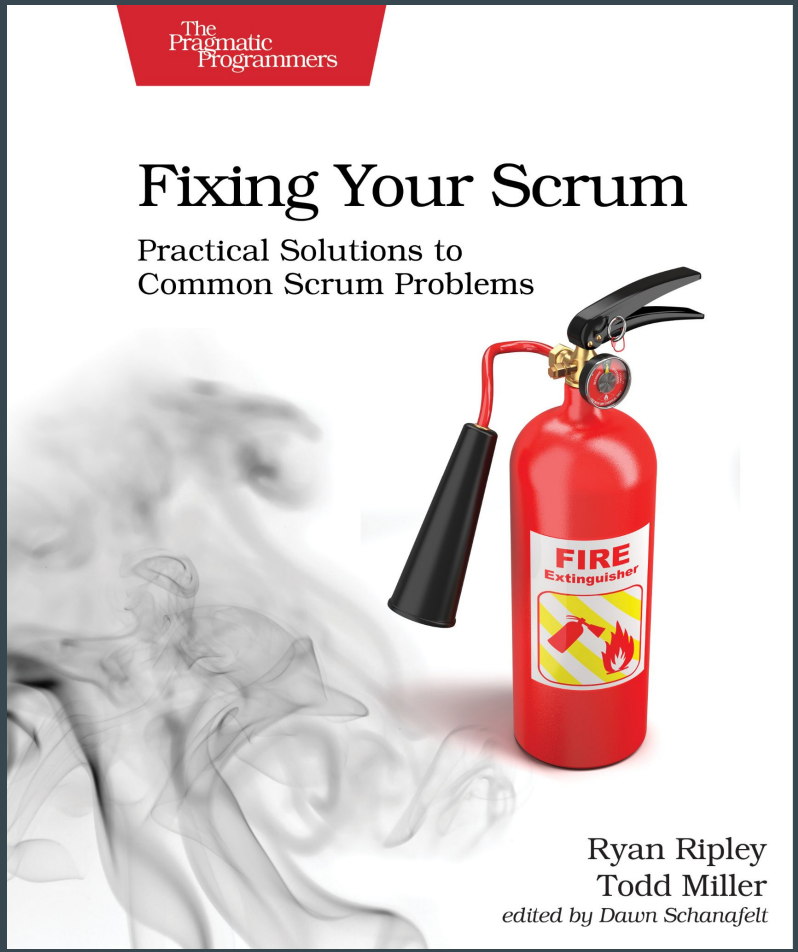
Scrum doesn't work for us

# To do

Read the Scrum Guide

Read a book

Take a course



1

# Experiment beyond Scrum
# not before Scrum

2

Working, tested software
every sprint

# Manifesto for Agile Software Development

We are uncovering better ways of developing
software by doing it and helping others do it.
Through this work we have come to value:

**Individuals and interactions** over processes and tools
**Working software** over comprehensive documentation
**Customer collaboration** over contract negotiation
**Responding to change** over following a plan

That is, while there is value in the items on
the right, we value the items on the left more.

| | | |
|---|---|---|
| Kent Beck | James Grenning | Robert C. Martin |
| Mike Beedle | Jim Highsmith | Steve Mellor |
| Arie van Bennekum | Andrew Hunt | Ken Schwaber |
| Alistair Cockburn | Ron Jeffries | Jeff Sutherland |
| Ward Cunningham | Jon Kern | Dave Thomas |
| Martin Fowler | Brian Marick | |



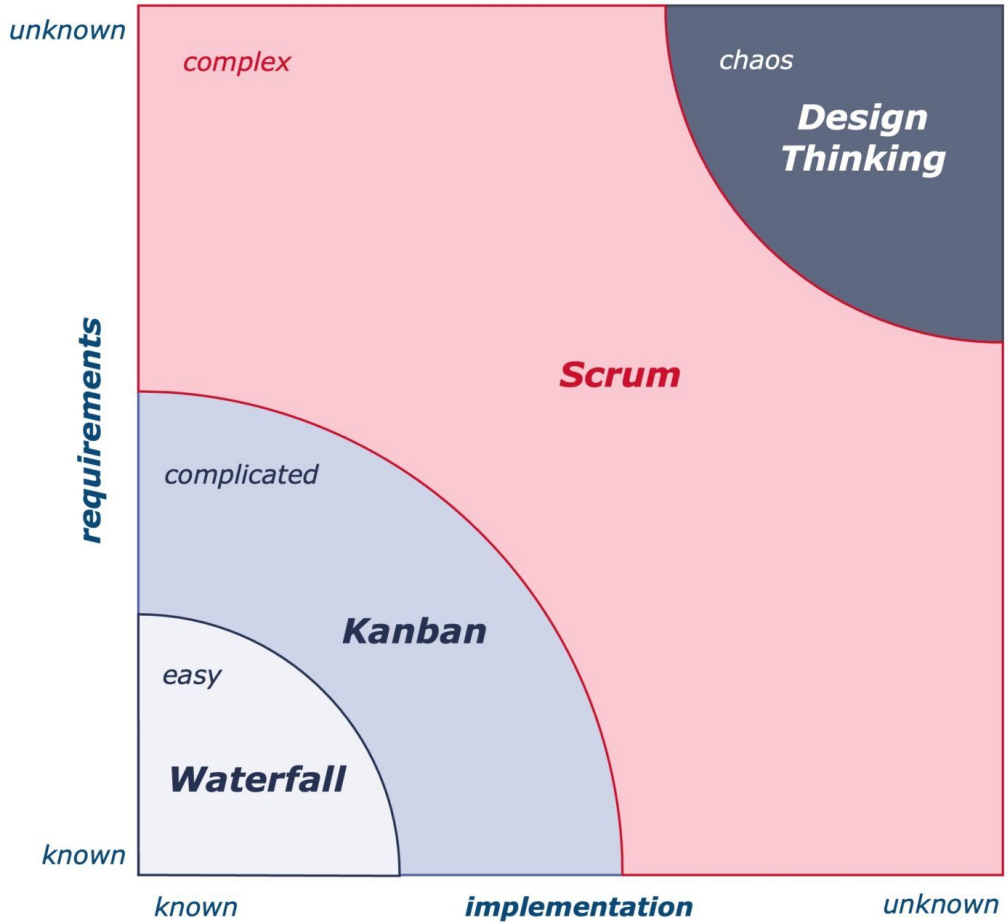
Twelve Principles of Agile Software

View Signatories

About the Authors
About the Manifesto

**Principle 1:**
Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

# Stacey Matrix



**Principle 7:**

Working software is the primary measure of progress.

# Principle 7:

Working software is the primary measure of progress.

in the customers hands!


SPRINT REVIEW
DONE WORK
FEEDBACK
SCRUM TEAM
STAKEHOLDERS

# To do

Get really good at vertical slicing

Start here: https://www.reddit.com/r/agile/comments/1btxpzd

# To do

Get really good at vertical slicing

Start here: https://www.reddit.com/r/agile/comments/1btxpzd

Erase all dependencies

- decoupling architecture
- team changes (#team-topologies)
- incur (some) technical debt
- feature flags

# To do

Get really good at vertical slicing

Start here: https://www.reddit.com/r/agile/comments/1btxpzd

Erase all dependencies

- decoupling architecture
- team changes (#team-topologies)
- incur (some) technical debt
- feature flags

Be smart about risks, avoid big-design up-front

2

Working, tested software
every sprint

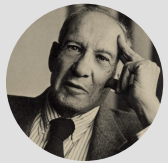
3

# Know how your customers are using the product


SPRINT REVIEW
DONE WORK
FEEDBACK
SCRUM TEAM
STAKEHOLDERS

There is nothing so useless
as doing with great efficiency
that which should not be done at all.

**Peter Drucker**

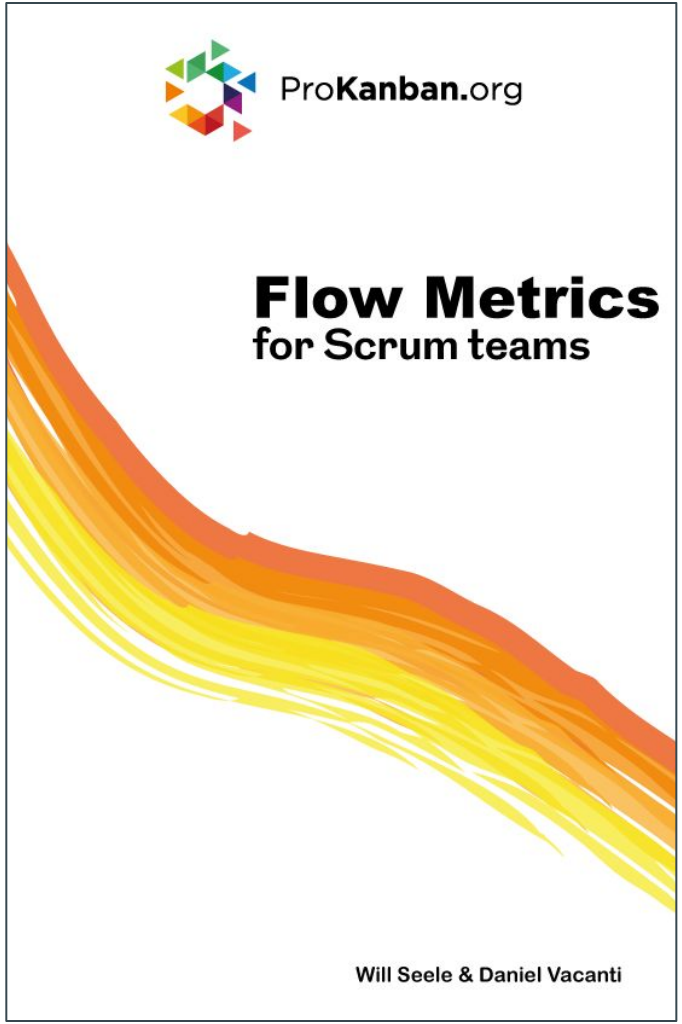


# To do: tracking

| feature_foo_clicks | | |
|---|---|---|
| **id** | **user_id** | **timestamp** |
| 1 | 1 | 2025-03-10T14:30:10Z |
| 2 | 2 | 2025-03-10T14:31:23Z |
| 3 | 1 | 2025-03-11T09:16:00Z |
| 4 | 3 | 2025-03-12T04:10:59Z |

# To do: visualisation

1. Options (Backlog)
2. Discovery
3. Building
    a. Not started
    b. Coding
    c. Code Review
    d. Ready for release
4. Validating
5. Done



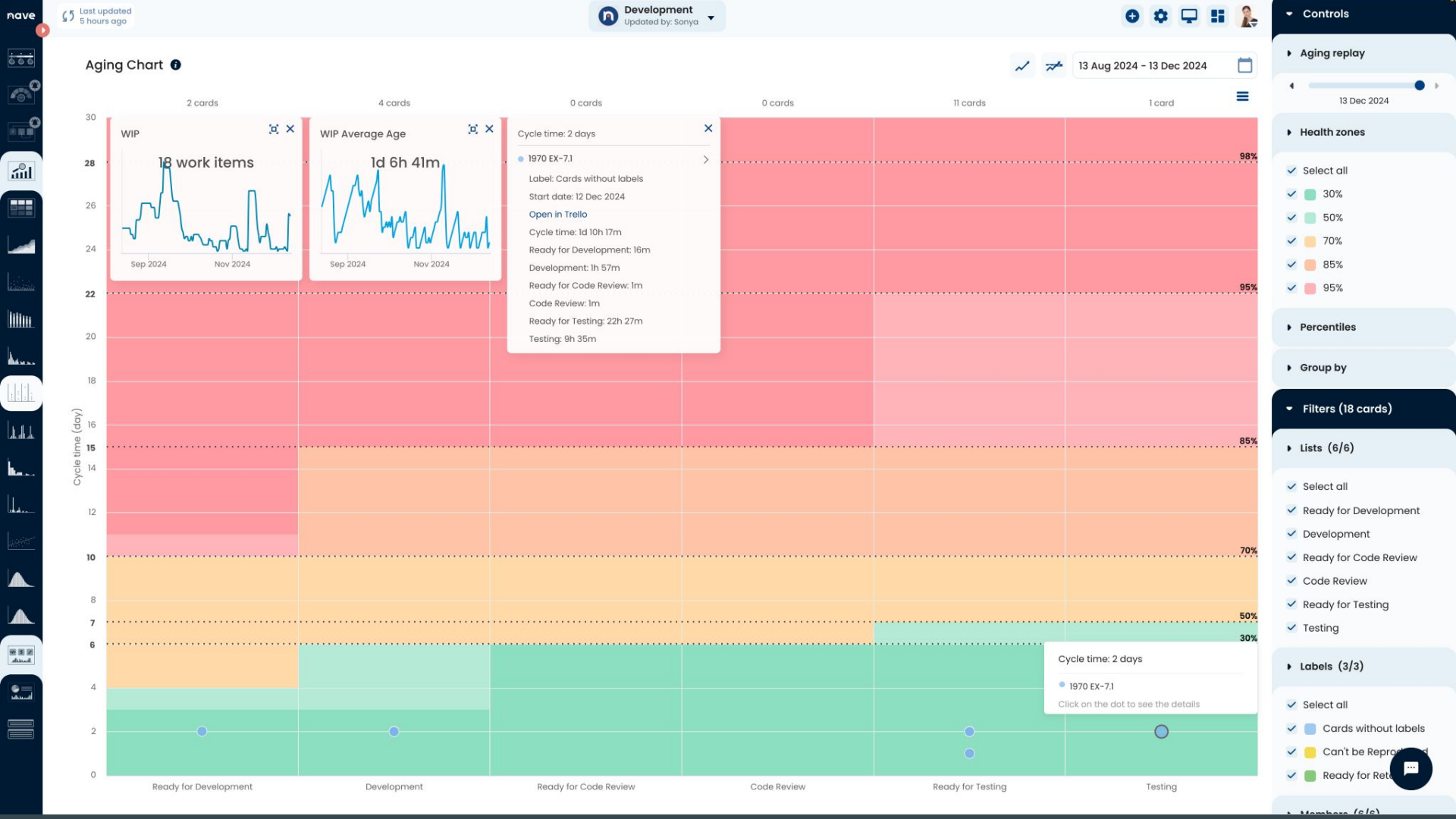
3

# Know how your customers are using the product

4

Do all work
on the board


鉄道改変予定


nave
Last updated
5 hours ago
Development
Updated by: Sonya
Aging Chart
13 Aug 2024 - 13 Dec 2024
2 cards
4 cards
0 cards
0 cards
11 cards
1 card
WIP
18 work items
Sep 2024
Nov 2024
WIP Average Age
1d 6h 41m
Sep 2024
Nov 2024
Cycle time: 2 days
1970 EX-7.1
Label: Cards without labels
Start date: 12 Dec 2024
Open in Trello
Cycle time: 1d 10h 17m
Ready for Development: 16m
Development: 1h 57m
Ready for Code Review: 1m
Code Review: 1m
Ready for Testing: 22h 27m
Testing: 9h 35m
Cycle time (day)
98%
95%
85%
70%
50%
30%
Cycle time: 2 days
1970 EX-7.1
Click on the dot to see the details
Ready for Development
Development
Ready for Code Review
Code Review
Ready for Testing
Testing
Controls
Aging replay
13 Dec 2024
Health zones
Select all
30%
50%
70%
85%
95%
Percentiles
Group by
Filters (18 cards)
Lists (6/6)
Select all
Ready for Development
Development
Ready for Code Review
Code Review
Ready for Testing
Testing
Labels (3/3)
Select all
Cards without labels
Can't be Repro
Ready for Ret

# To do

Create item: [title] + [assigned you] + [in progress]

Consider skipping ticket when:

- doing it right now
- takes < 10 minutes (and you're 99% certain)
- is a repeating action (automate it!)

Bias to having a single board per team.

Items never go back: stuck is preferable.

4

Do all work
on the board

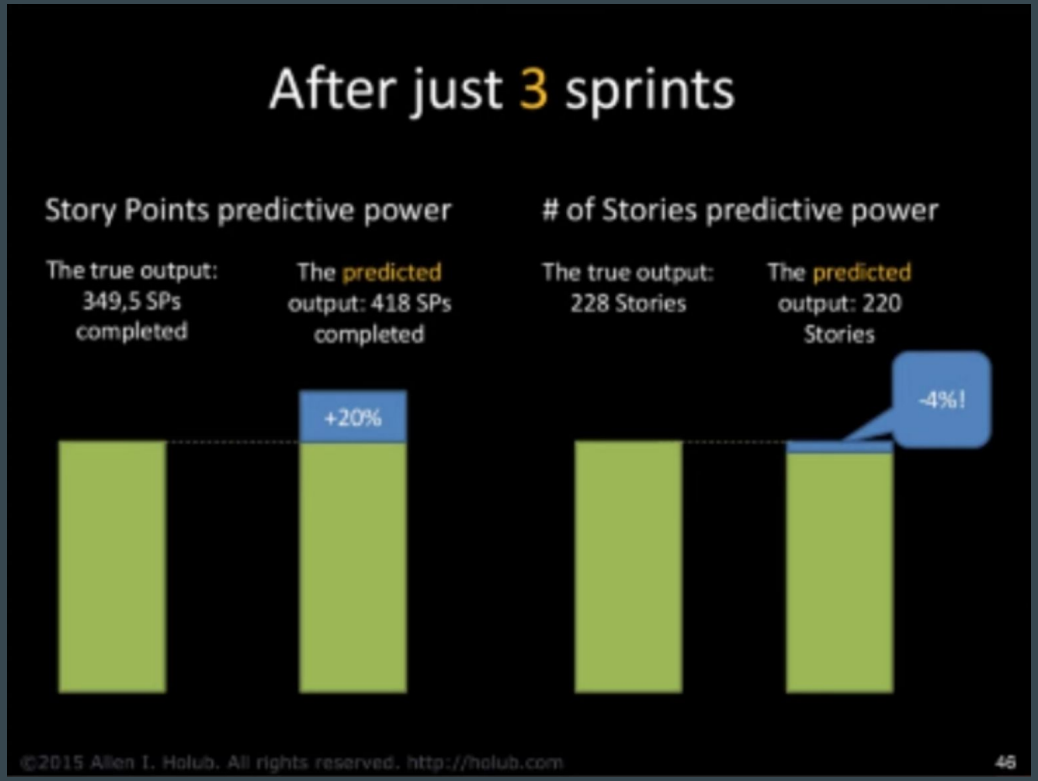
5

All estimates
are bullshit

# Estimation

The fine art of guessing

# #NoEstimates




#NoEstimates (Allen Holub)
https://www.youtube.com/watch?v=QVBInCTu9Ms

# To do

Good:

same-sizing everything: "1 story point" and "too big"
https://mdalmijn.com/p/roman-estimation-a-simple-easy-and

Better:

use data

# Monte Carlo simulation

Record throughput per day:

0 7 2 6 6 3 7 2 9 1 13 0 0 2

# Monte Carlo simulation

Record throughput per day:

0 7 2 6 6 3 7 2 9 1 13 0 0 2

Sample next 7 days:

2 0 2 7 0 3 2

# Monte Carlo simulation

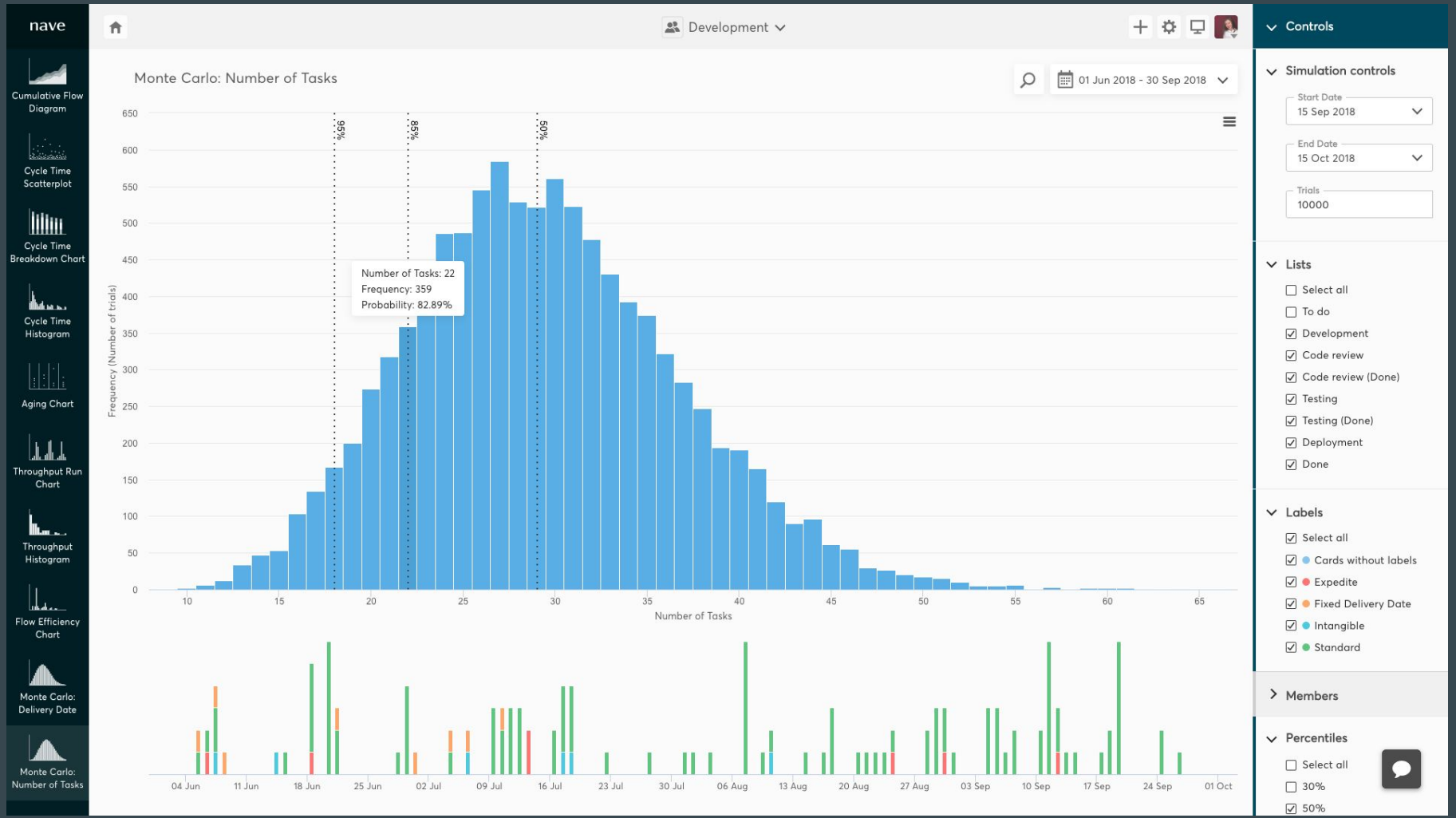
Record throughput per day:

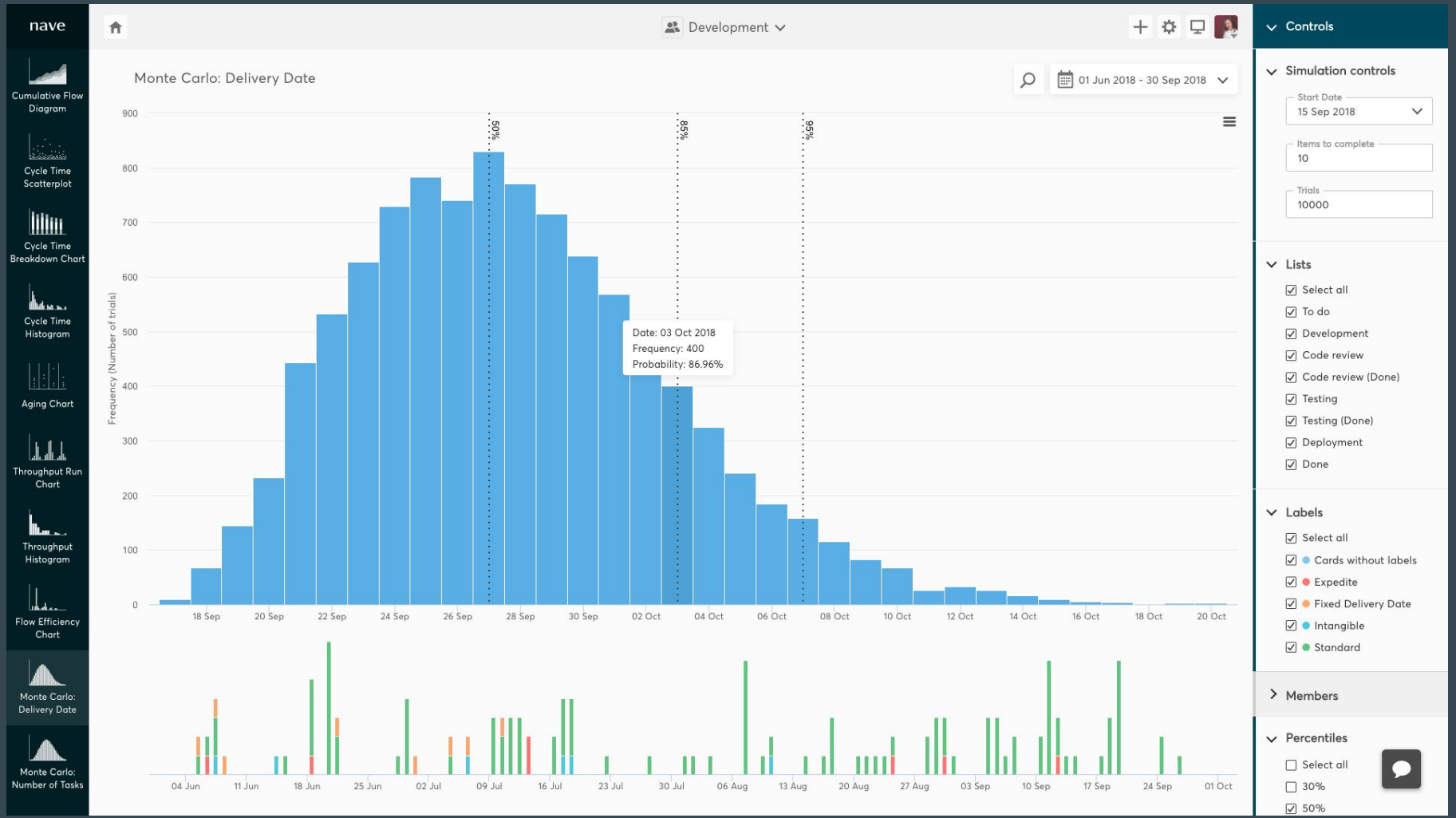
0 7 2 6 6 3 7 2 9 1 13 0 0 2

Sample next 7 days:

2 0 2 7 0 3 2 = 16

Next week, we'll finish 16 stories.


nave
Cumulative Flow Diagram
Cycle Time Scatterplot
Cycle Time Breakdown Chart
Cycle Time Histogram
Aging Chart
Throughput Run Chart
Throughput Histogram
Flow Efficiency Chart
Monte Carlo: Delivery Date
Monte Carlo: Number of Tasks
Development
Monte Carlo: Number of Tasks
01 Jun 2018 - 30 Sep 2018
95%
85%
50%
Number of Tasks: 22
Frequency: 359
Probability: 82.89%
Frequency (Number of trials)
Number of Tasks
04 Jun
11 Jun
18 Jun
25 Jun
02 Jul
09 Jul
16 Jul
23 Jul
30 Jul
06 Aug
13 Aug
20 Aug
27 Aug
03 Sep
10 Sep
17 Sep
24 Sep
01 Oct
Controls
Simulation controls
Start Date
15 Sep 2018
End Date
15 Oct 2018
Trials
10000
Lists
Select all
To do
Development
Code review
Code review (Done)
Testing
Testing (Done)
Deployment
Done
Labels
Select all
Cards without labels
Expedite
Fixed Delivery Date
Intangible
Standard
Members
Percentiles
Select all
30%
50%


nave
Development
Controls
Cumulative Flow Diagram
Cycle Time Scatterplot
Cycle Time Breakdown Chart
Cycle Time Histogram
Aging Chart
Throughput Run Chart
Throughput Histogram
Flow Efficiency Chart
Monte Carlo: Delivery Date
Monte Carlo: Number of Tasks
Monte Carlo: Delivery Date
01 Jun 2018 - 30 Sep 2018
50%
85%
95%
Frequency (Number of trials)
Date: 03 Oct 2018
Frequency: 400
Probability: 86.96%
18 Sep
20 Sep
22 Sep
24 Sep
26 Sep
28 Sep
30 Sep
02 Oct
04 Oct
06 Oct
08 Oct
10 Oct
12 Oct
14 Oct
16 Oct
18 Oct
20 Oct
04 Jun
11 Jun
18 Jun
25 Jun
02 Jul
09 Jul
16 Jul
23 Jul
30 Jul
06 Aug
13 Aug
20 Aug
27 Aug
03 Sep
10 Sep
17 Sep
24 Sep
01 Oct
Simulation controls
Start Date
15 Sep 2018
Items to complete
10
Trials
10000
Lists
Select all
To do
Development
Code review
Code review (Done)
Testing
Testing (Done)
Deployment
Done
Labels
Select all
Cards without labels
Expedite
Fixed Delivery Date
Intangible
Standard
Members
Percentiles
Select all
30%
50%

5

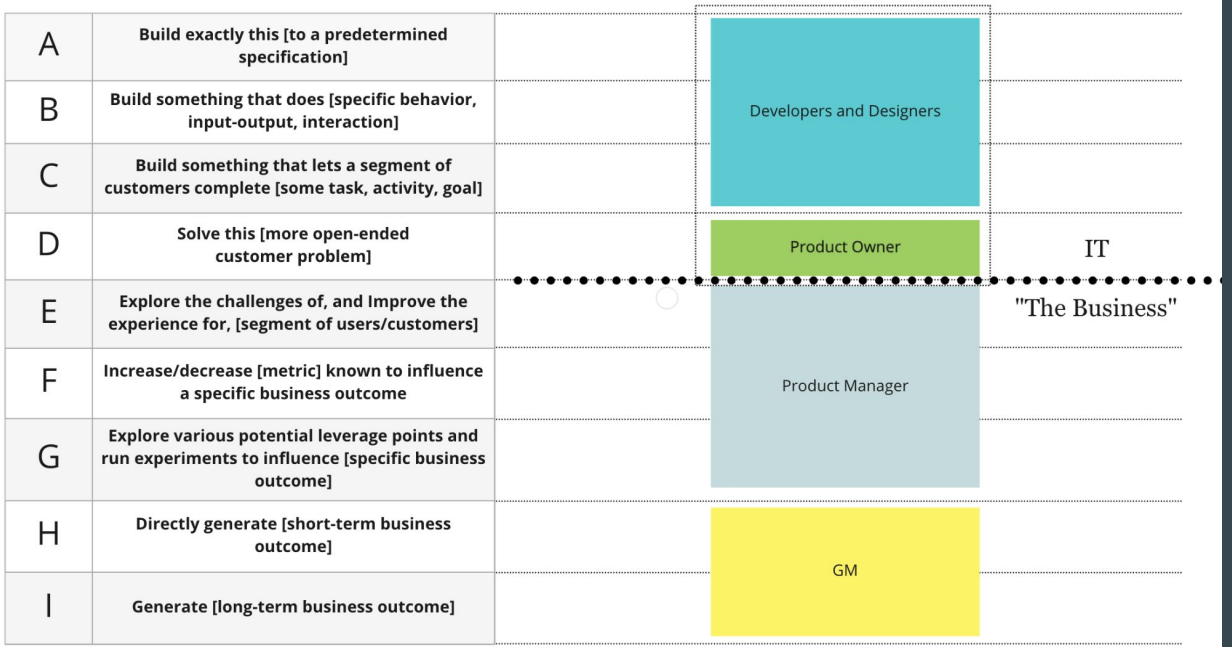
All estimates
are bullshit

# Solve business problems

# MANDATE LEVELS

@johncutlefish

Effort is happening at all of these levels concurrently. It is all connected (explicitly, and often implicitly).




https://cutlefish.substack.com/p/tbm-2752-mandate-levels

# To do

Don't start here

Working software in the customers hands

Build a prototype

Get users in the room while designing

# Solve business problems

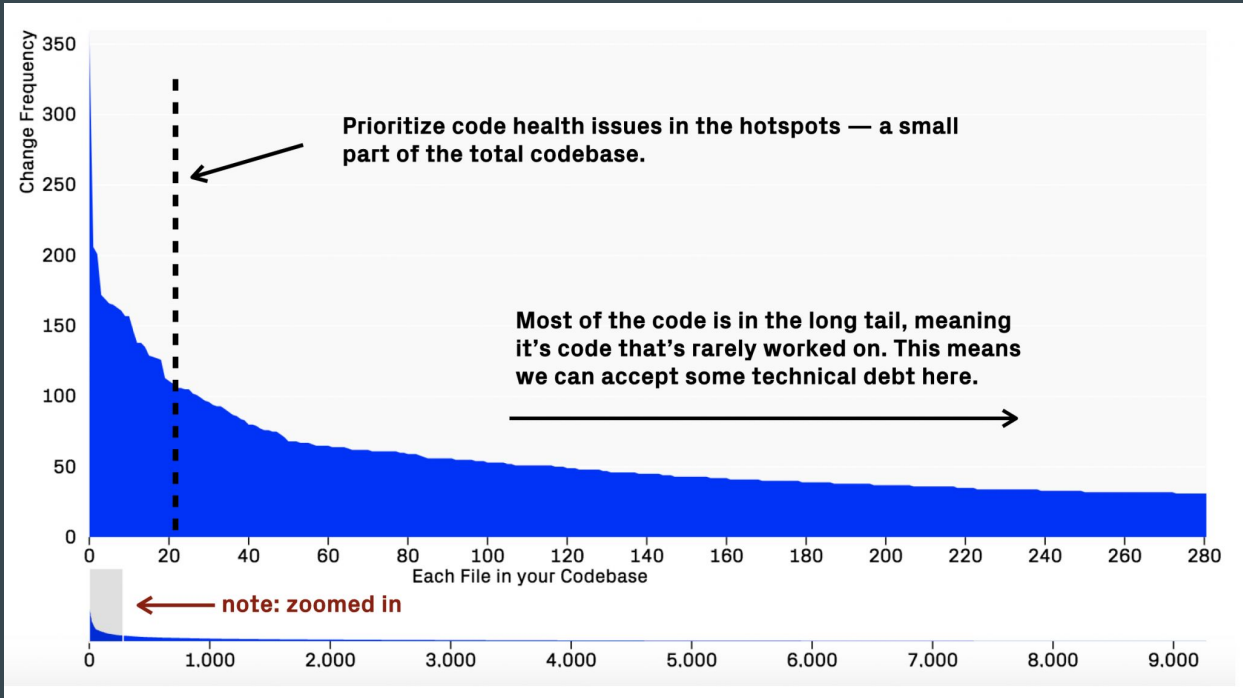
7

# Deal with technical debt


QUALITY

CONSISTENCY

# To do




https://www.getunleash.io/blog/manage-technical-debt-measure-the-impact-and-prioritize-improvements-guided-by-development-data

# To do

Minimum:

1. error monitoring service (sentry)
2. static analysis (psalm, phpstan)
3. existing coding standard enforced by linter (pint)

Fix bugs

7

# Deal with technical debt

# Have a strong Definition of Done

# To do

Absolute

Automated

Agreed with PO

# Have a strong Definition of Done

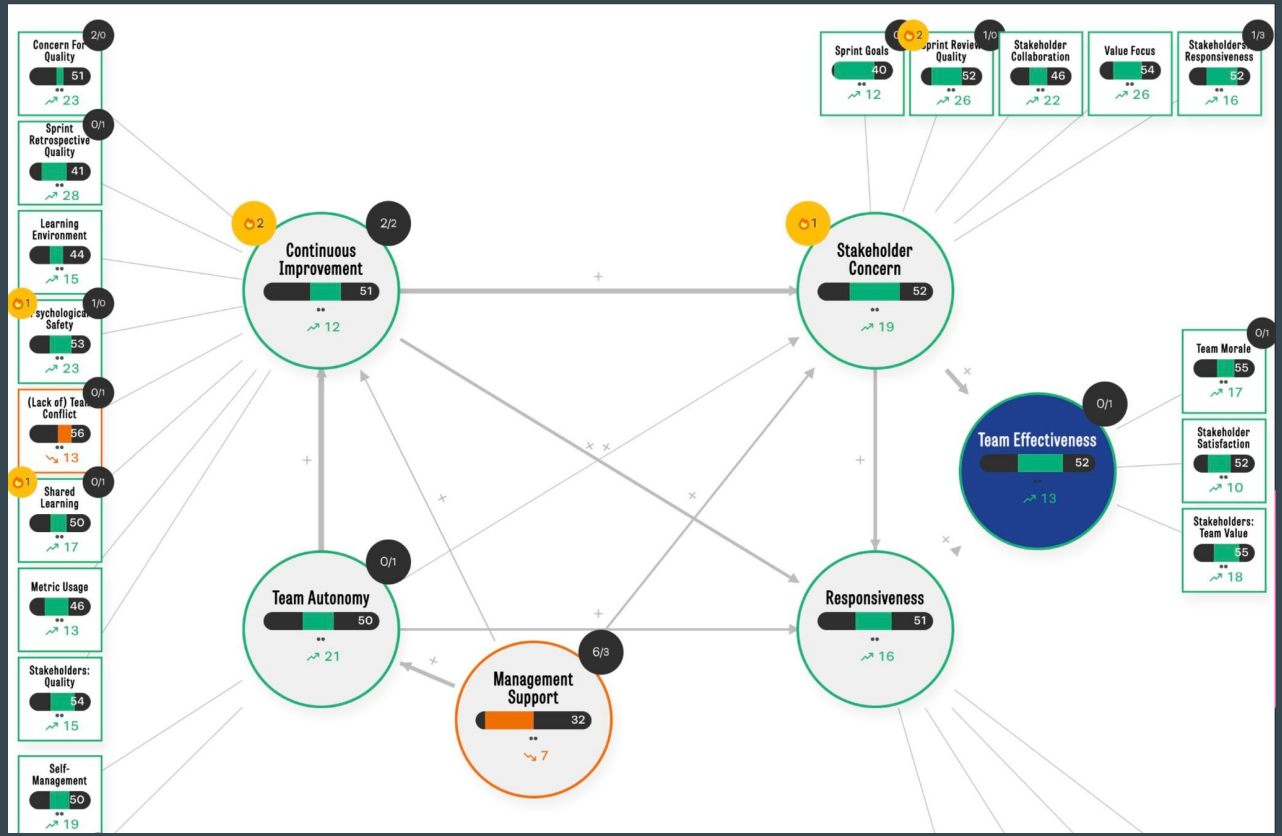
# Make retrospectives effective


THIS IS FINE.

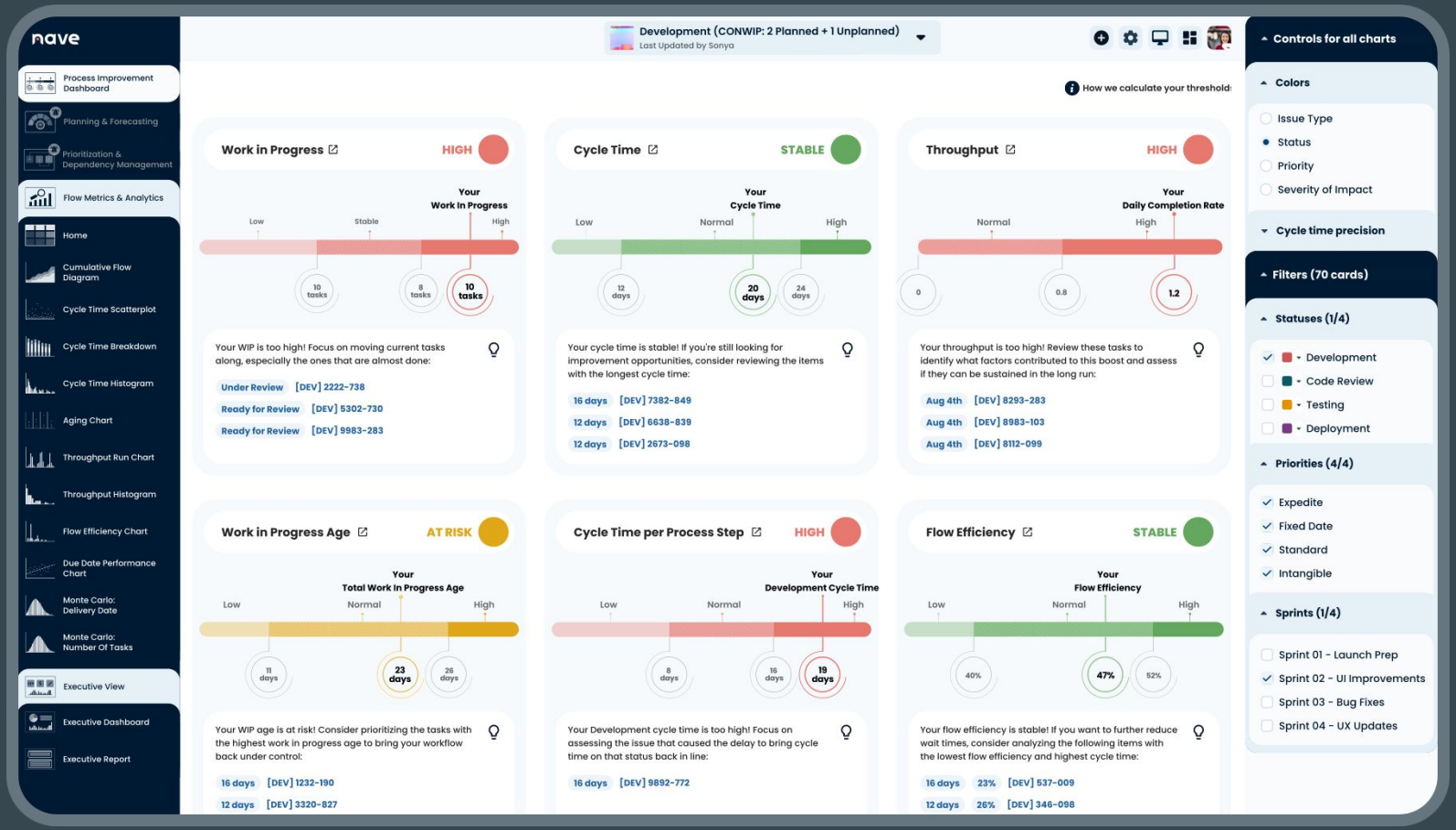
# To do

Escalate what you cannot solve

Data-driven decision making




columinity.com


nave
Process Improvement Dashboard
Planning & Forecasting
Prioritization & Dependency Management
Flow Metrics & Analytics
Home
Cumulative Flow Diagram
Cycle Time Scatterplot
Cycle Time Breakdown
Cycle Time Histogram
Aging Chart
Throughput Run Chart
Throughput Histogram
Flow Efficiency Chart
Due Date Performance Chart
Monte Carlo: Delivery Date
Monte Carlo: Number Of Tasks
Executive View
Executive Dashboard
Executive Report
Development (CONWIP: 2 Planned + 1 Unplanned)
Last Updated by Sonya
How we calculate your threshold
Work in Progress
HIGH
Your Work in Progress
Low
Stable
High
10 tasks
8 tasks
10 tasks
Your WIP is too high! Focus on moving current tasks along, especially the ones that are almost done:
Under Review [DEV] 2222-738
Ready for Review [DEV] 5302-730
Ready for Review [DEV] 9983-283
Cycle Time
STABLE
Your Cycle Time
Low
Normal
High
12 days
20 days
24 days
Your cycle time is stable! If you're still looking for improvement opportunities, consider reviewing the items with the longest cycle time:
16 days [DEV] 7382-849
12 days [DEV] 6638-839
12 days [DEV] 2673-098
Throughput
HIGH
Your Daily Completion Rate
Normal
High
0
0.8
1.2
Your throughput is too high! Review these tasks to identify what factors contributed to this boost and assess if they can be sustained in the long run:
Aug 4th [DEV] 8293-283
Aug 4th [DEV] 8983-103
Aug 4th [DEV] 8112-099
Work in Progress Age
AT RISK
Your Total Work in Progress Age
Low
Normal
High
11 days
23 days
26 days
Your WIP age is at risk! Consider prioritizing the tasks with the highest work in progress age to bring your workflow back under control:
16 days [DEV] 1232-190
12 days [DEV] 3320-827
Cycle Time per Process Step
HIGH
Your Development Cycle Time
Low
Normal
High
8 days
16 days
19 days
Your Development cycle time is too high! Focus on assessing the issue that caused the delay to bring cycle time on that status back in line:
16 days [DEV] 9892-772
Flow Efficiency
STABLE
Your Flow Efficiency
Low
Normal
High
40%
47%
52%
Your flow efficiency is stable! If you want to further reduce wait times, consider analyzing the following items with the lowest flow efficiency and highest cycle time:
16 days 23% [DEV] 537-009
12 days 26% [DEV] 346-098
Controls for all charts
Colors
Issue Type
Status
Priority
Severity of Impact
Cycle time precision
Filters (70 cards)
Statuses (1/4)
Development
Code Review
Testing
Deployment
Priorities (4/4)
Expedite
Fixed Date
Standard
Intangible
Sprints (1/4)
Sprint 01 - Launch Prep
Sprint 02 - UI Improvements
Sprint 03 - Bug Fixes
Sprint 04 - UX Updates

getnave.com

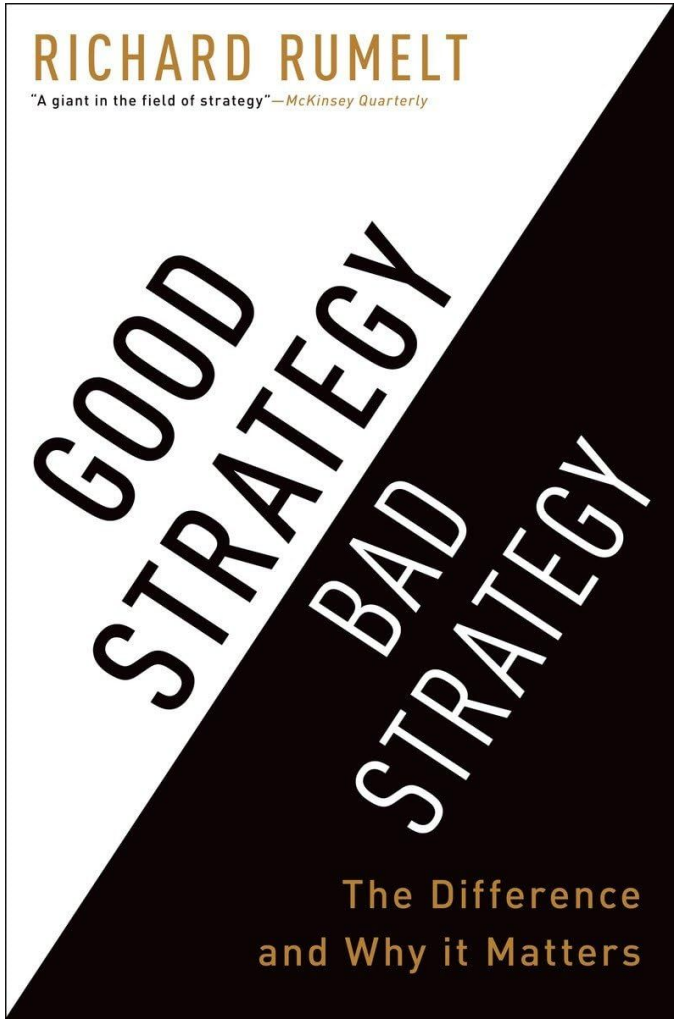
# Make retrospectives effective

# To do

# To do

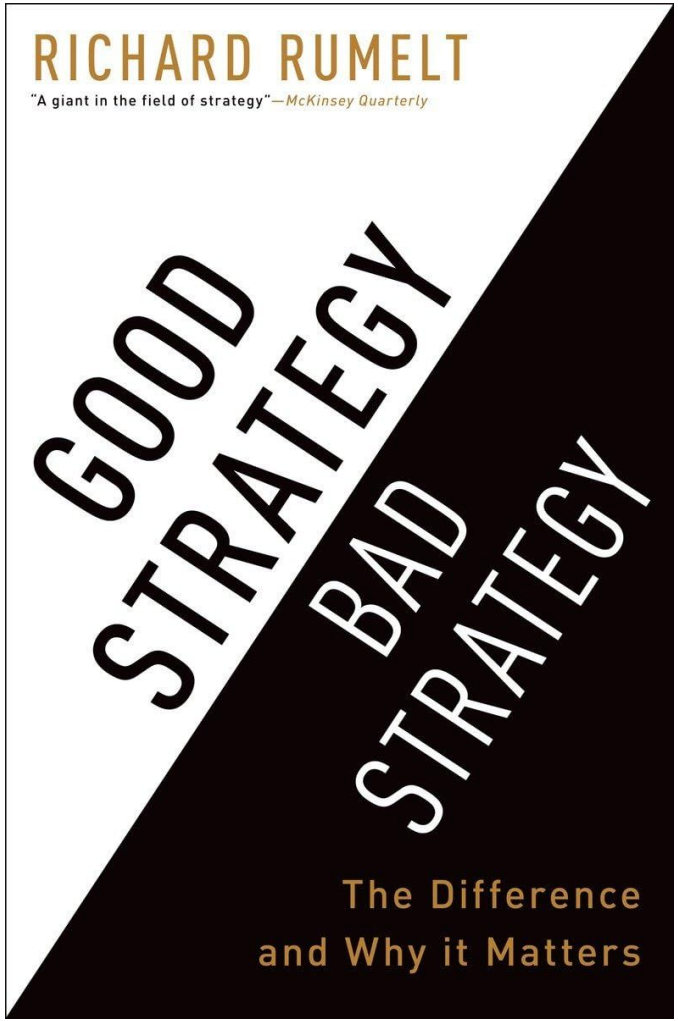
1. Experiment beyond Scrum, not before Scrum
2. Working tested software, every sprint.
3. Know how your customers are using the product
4. Do all work on the board
5. All estimation is bullshit
6. Solve business problems
7. Deal with technical debt
8. Having a strong Definition of Done
9. Make retrospectives effective

# How to get started


RICHARD RUMELT
"A giant in the field of strategy"—McKinsey Quarterly
GOOD STRATEGY
BAD STRATEGY
The Difference
and Why it Matters

The kernel of a strategy contains three elements:

a diagnosis,
a guiding policy,
and coherent action.



# That's all

Slides
Feedback
Assessment

# Don't forget to like, subscribe and hit the bell button.

Slides
Feedback
Assessment

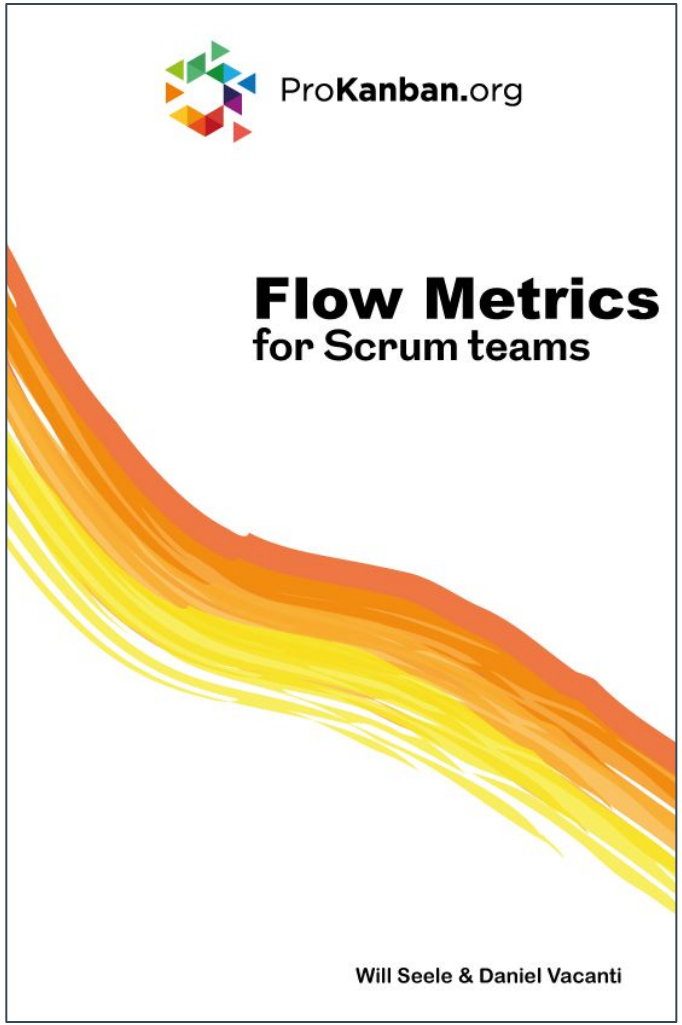
# Bonus content

# Flow Metrics for Scrum teams

| PBI | Started | Finished |
|---|---|---|
| 1 | 2025-03-01 | 2025-03-10 |
| 2 | 2025-02-16 | 2025-03-18 |
| 3 | 2025-03-17 | |
| 4 | | |

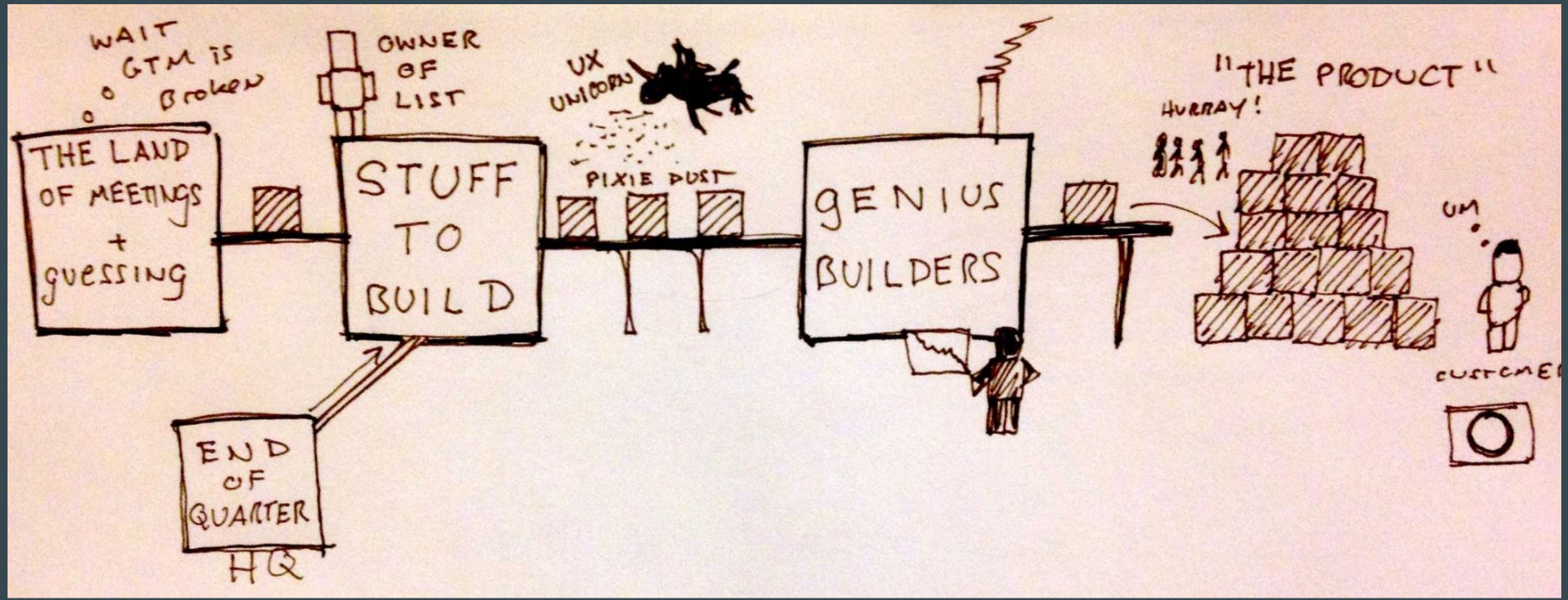
Measure

- WIP
- Cycle time
- Work item age
- Throughput



# Feature addiction

# Feature addiction



# Feature addiction

Unclear goals. The sprint goal !== the work.

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You almost certainly have a product management problem.

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Read this: https://kellanem.com/notes/faqs-from-coaching
on "the team isn't working hard enough"

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Read this: https://kellanem.com/notes/faqs-from-coaching
on "the team isn't working hard enough"

Run away.

You are not smarter
than the customer

# To do

... don't do that

Respect the customer

Regular contact helps

# DORA metrics

# Key DORA Metrics

## Deployment Frequency

The number of times per day that a release is deployed into production.

## Lead Time for Changes

Total time between the initiation of a feature request to the delivery of that feature to a customer.

## Mean Time to Recovery (MTTR)

Average time it takes the team to restore service when a failure/outage occurs in production.

## Change Failure Rate

Percentage of changes that resulted in degraded services, like the service impairment or outage, and need to be fixed.

| Software delivery performance metric | Elite | High | Medium | Low |
|---|---|---|---|---|
| **Deployment frequency**<br>For the primary application or service you work on, how often does your organization deploy code to production or release it to end users? | On-demand (multiple deploys per day) | Between once per week and once per month | Between once per month and once every 6 months | Fewer than once per six months |
| **Lead time for changes**<br>For the primary application or service you work on, what is your lead time for changes (i.e., how long does it take to go from code committed to code successfully running in production)? | Less than one hour | Between one day and one week | Between one month and six months | More than six months |
| **Time to restore service**<br>For the primary application or service you work on, how long does it generally take to restore service when a service incident or a defect that impacts users occurs (e.g., unplanned outage or service impairment)? | Less than one hour | Less than one day | Between one day and one week | More than six months |
| **Change failure rate**<br>For the primary application or service you work on, what percentage of changes to production or released to users result in degraded service (e.g., lead to service impairment or service outage) and subsequently require remediation (e.g., require a hotfix, rollback, fix forward, patch)? | 0%-15% | 16%-30% | 16%-30% | 16%-30% |

https://cloud.google.com/blog/products/devops-sre/using-the-four-keys-to-measure-your-devops-performance