



June 14th-18th

US Connect 2021

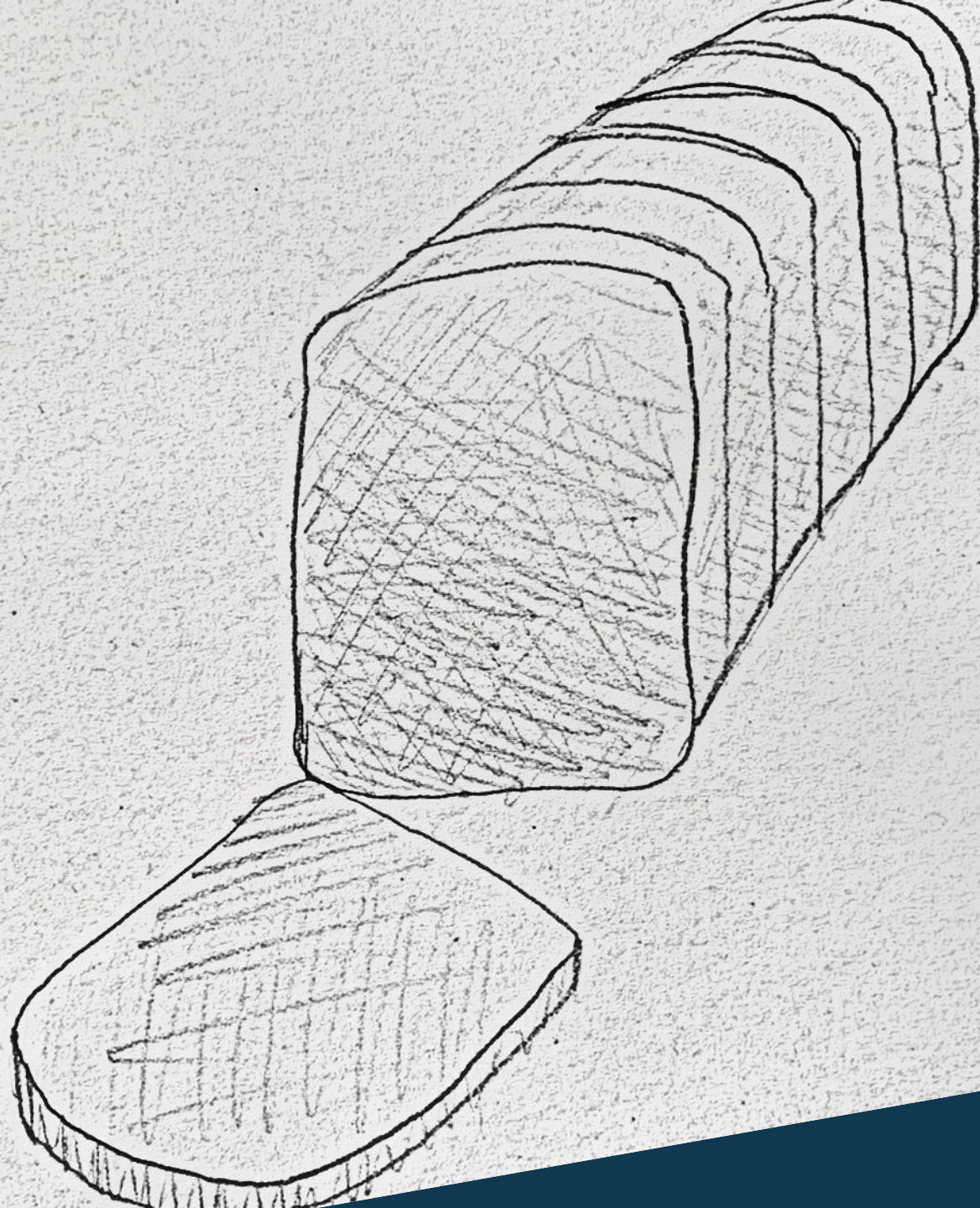
The Clinical Data
Science Conference

*The digital era outpaces traditional
Quality Assurance*

Hyperloop

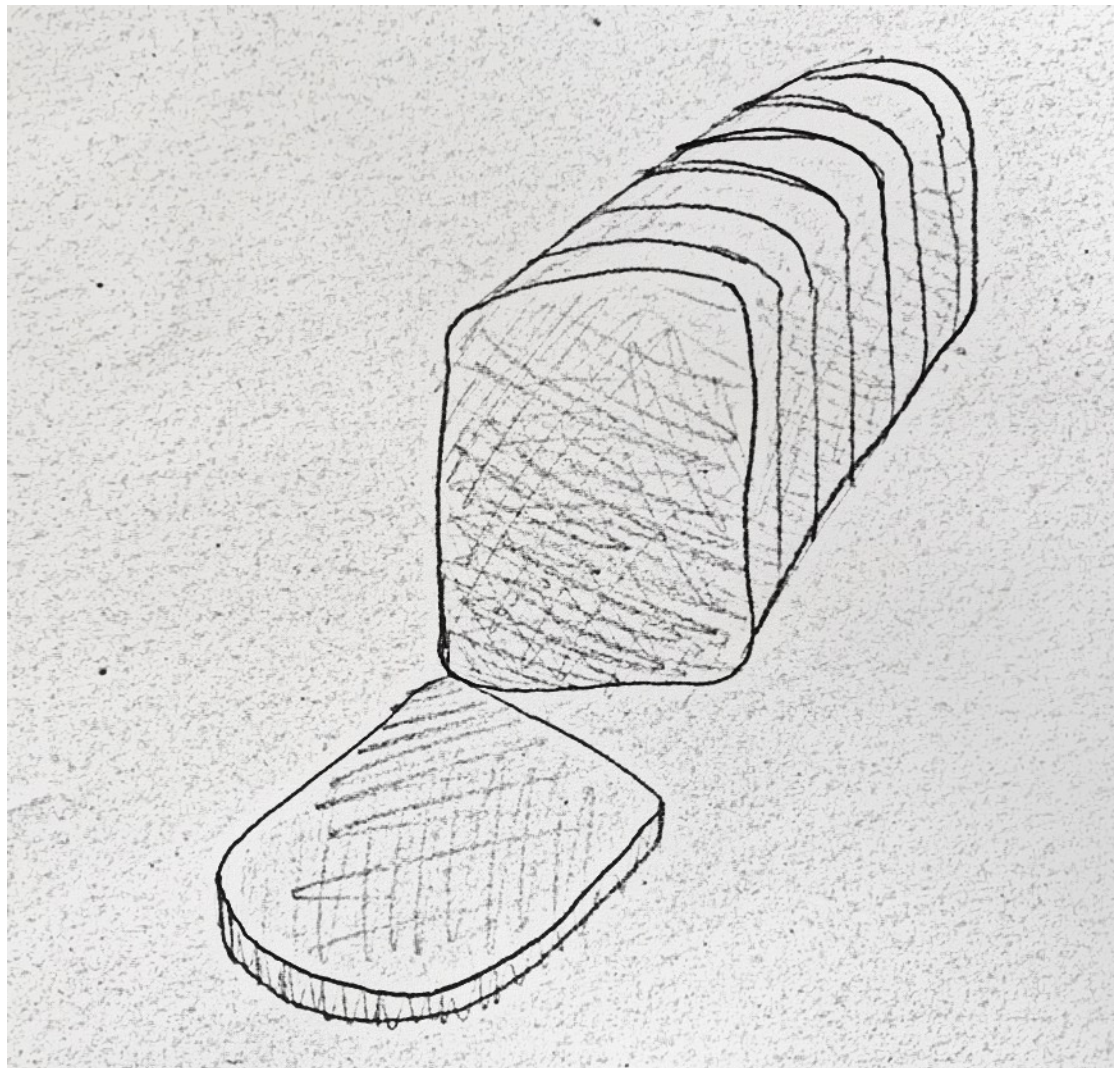


*Karl Brand, Miriam Ferrer Gonzalez &
Enrico Droigk, 17th June, 2021*



Introduction

Why we're here.



The best thing...

- I. *“Start with **motivation** for the novel agile GxP approach;*
- II. *then show a **scenario** with the blackbird project;*
- III. *finally, the **benefits** from the business point of view.”*

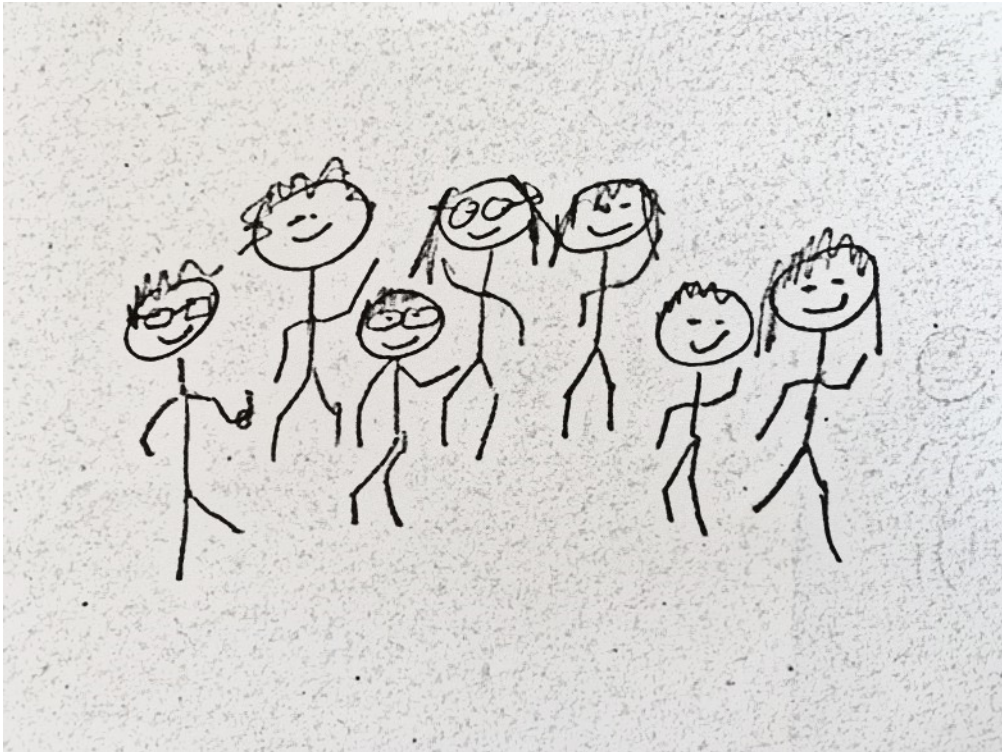
I. Motivation

The story: me.



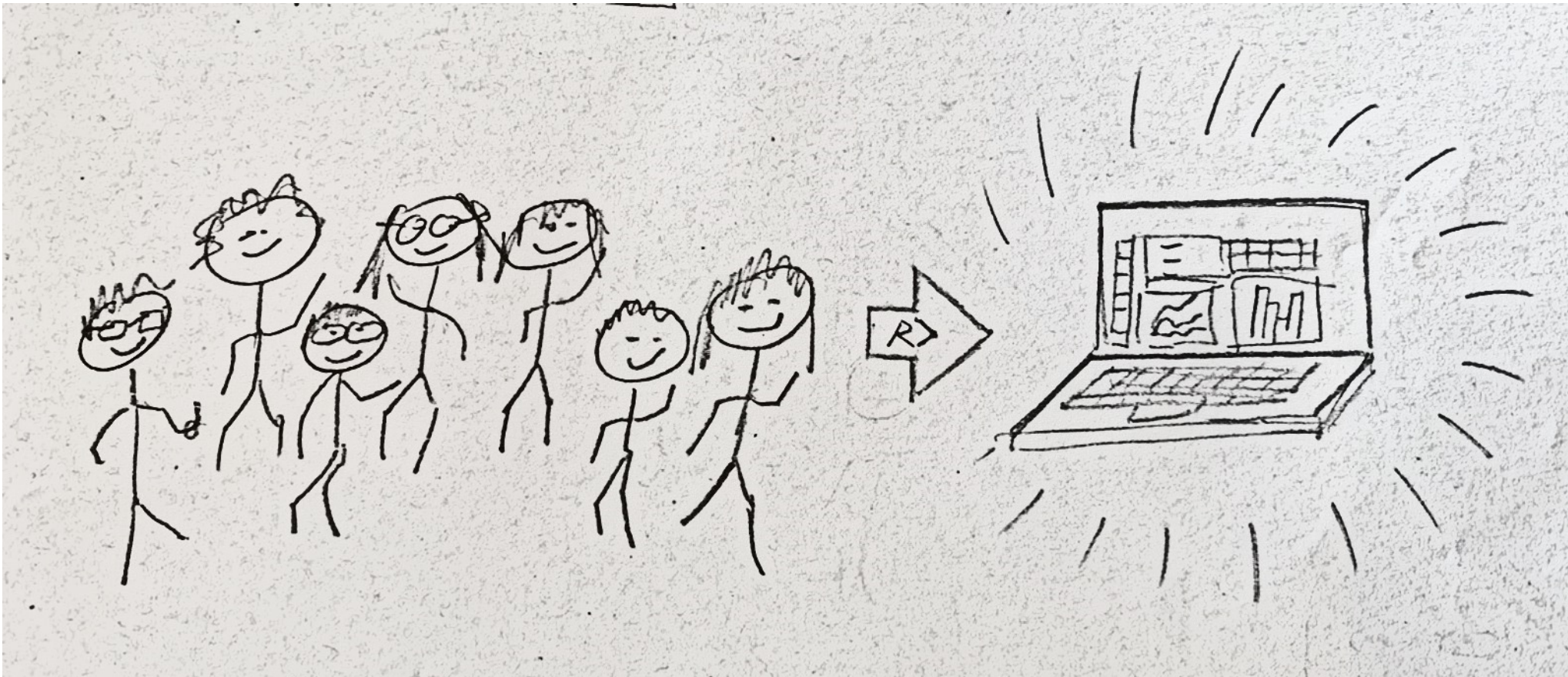
I. Motivation

The story: the team.



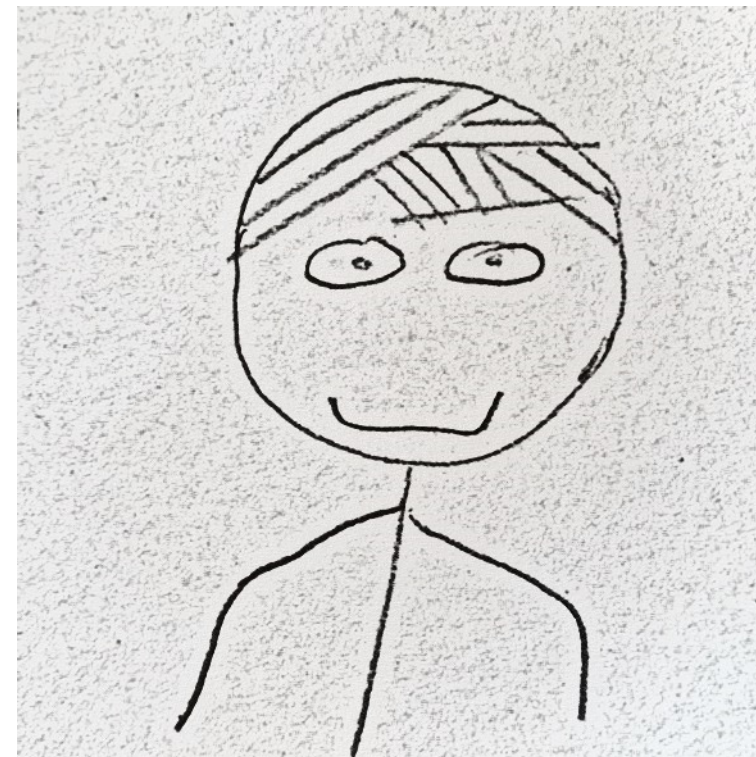
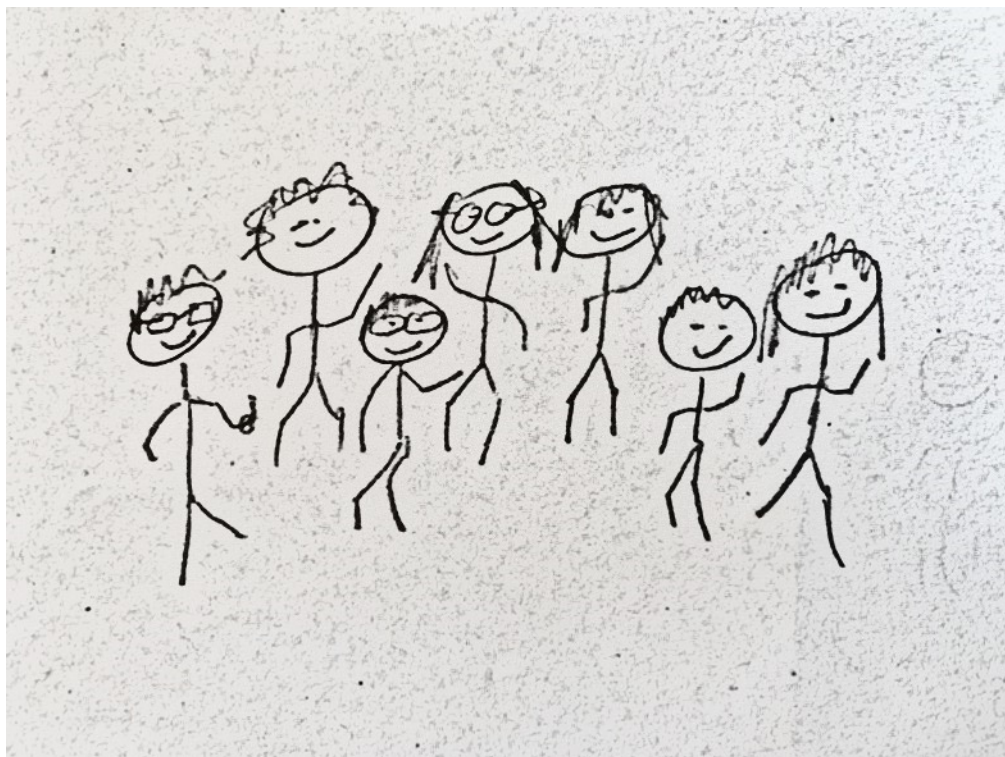
I. Motivation

The story: we code apps.



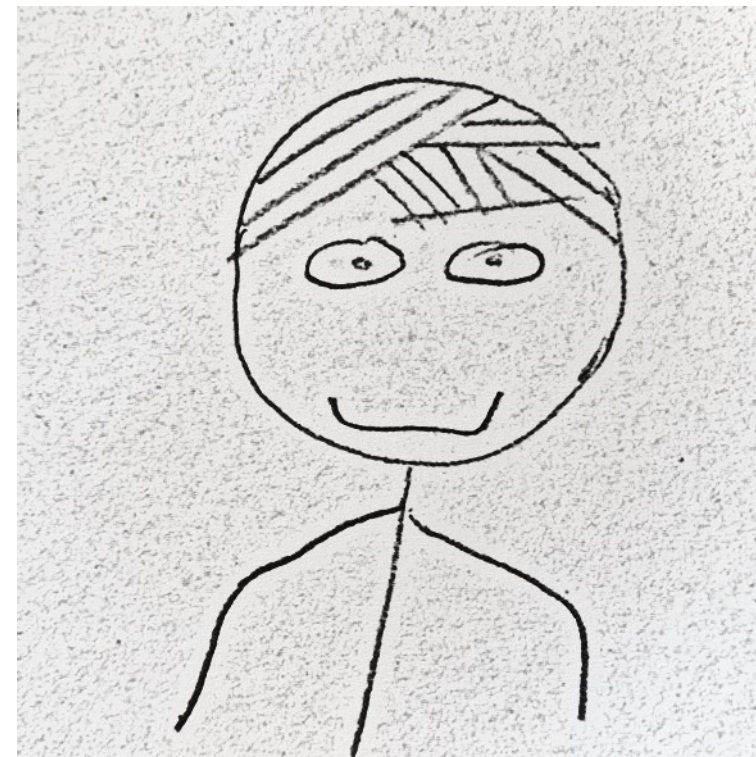
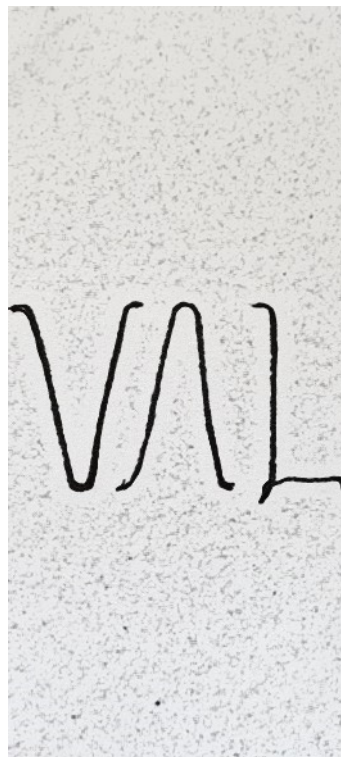
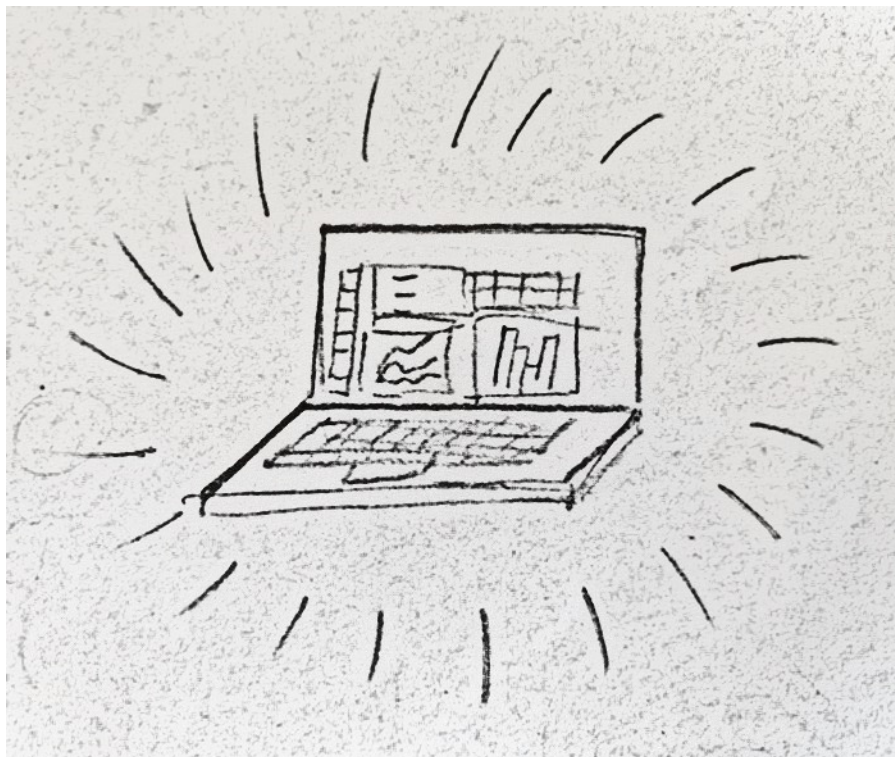
I. Motivation

The story: better outcomes for patients.

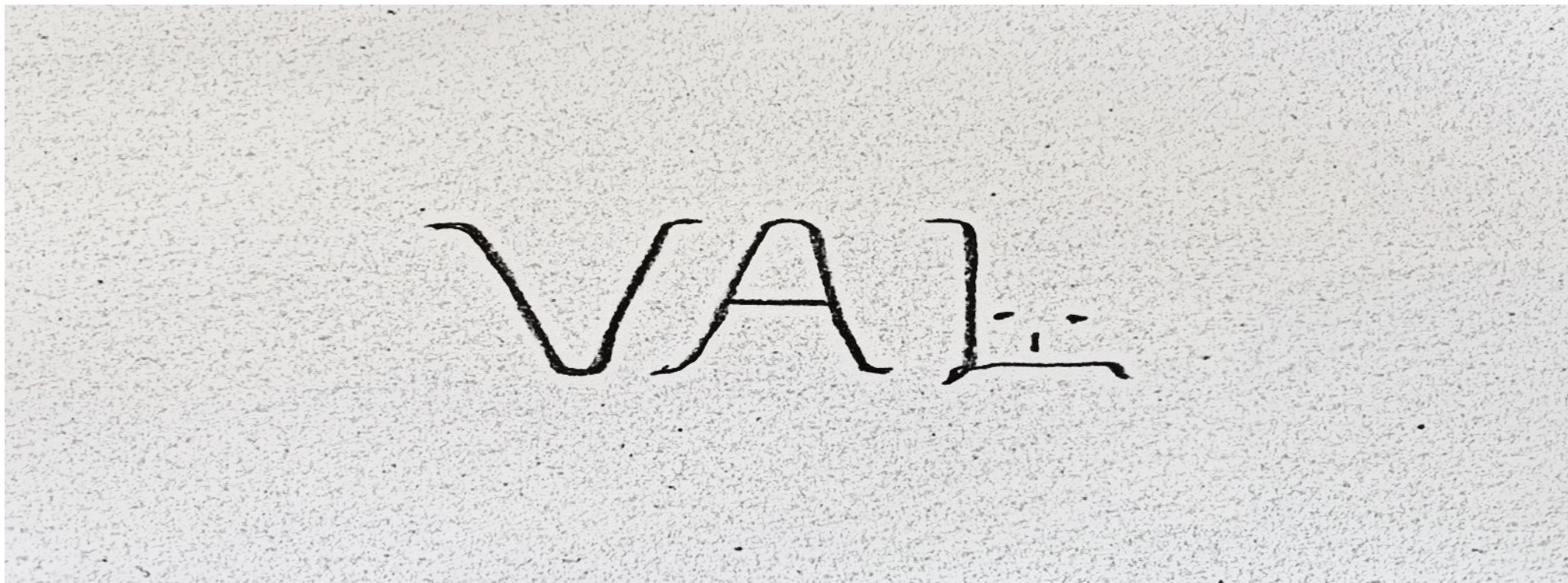


I. Motivation

Little required thing: validation.



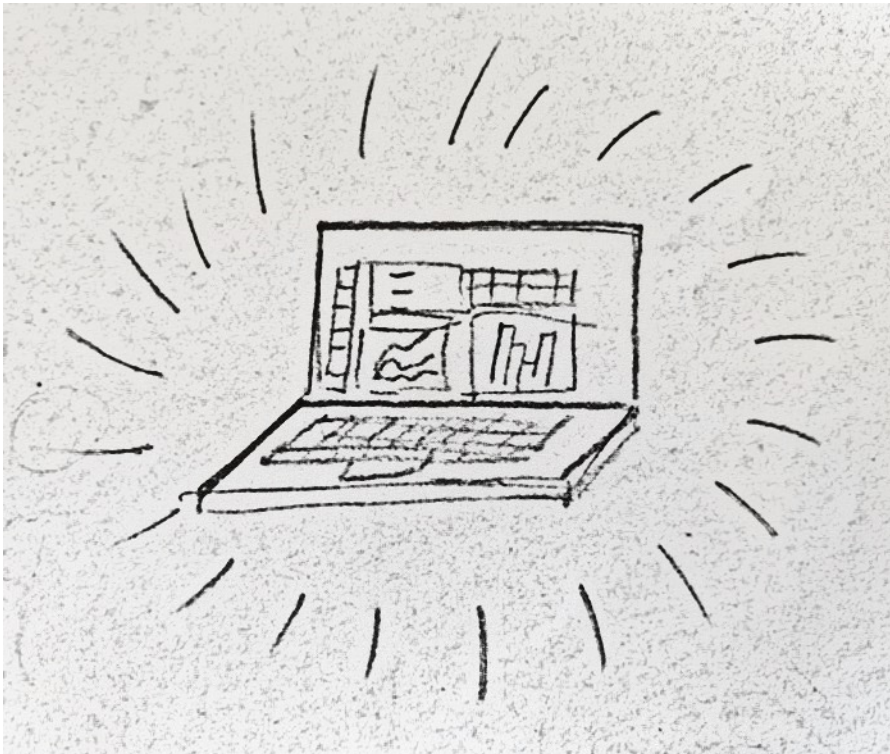
Rather **BIG** required thing.



I. Motivation

a. Minimal viable product demonstrates business value;

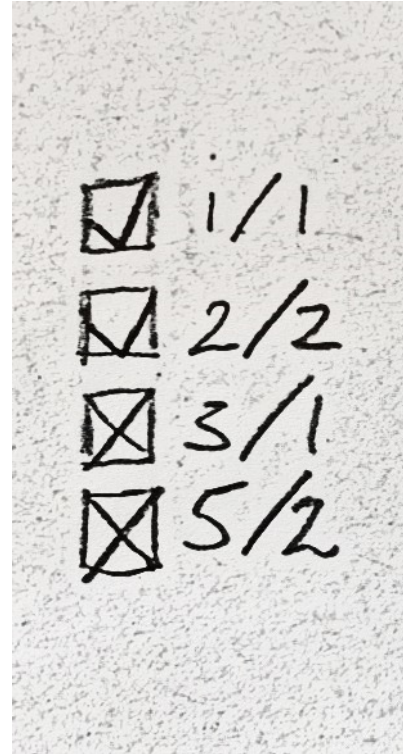
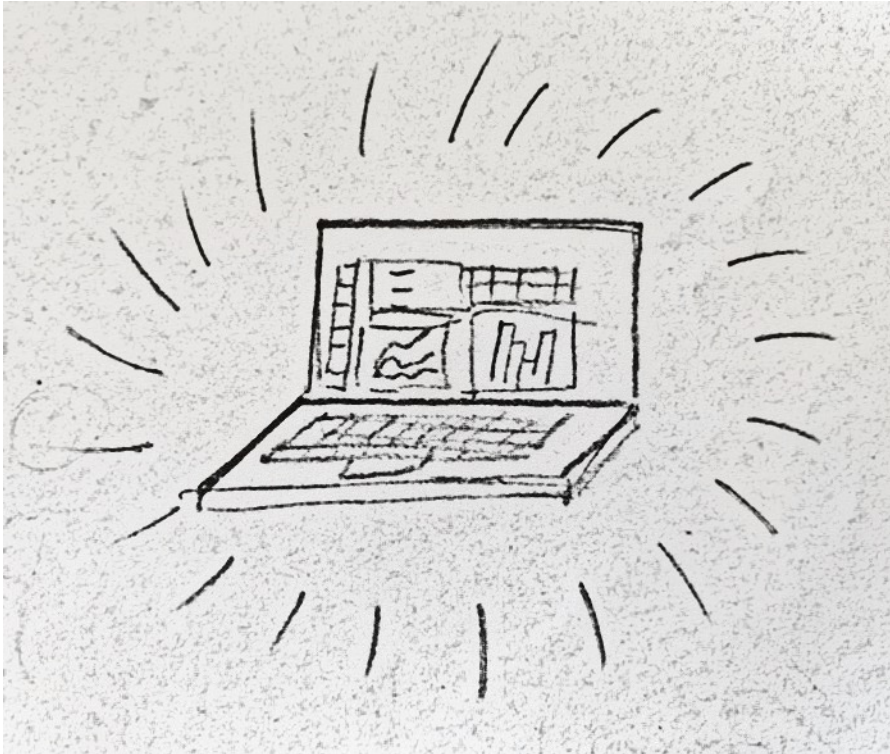
Justifies....



I. Motivation

b. **Big** effort creating tests to confirm the app works as expected;

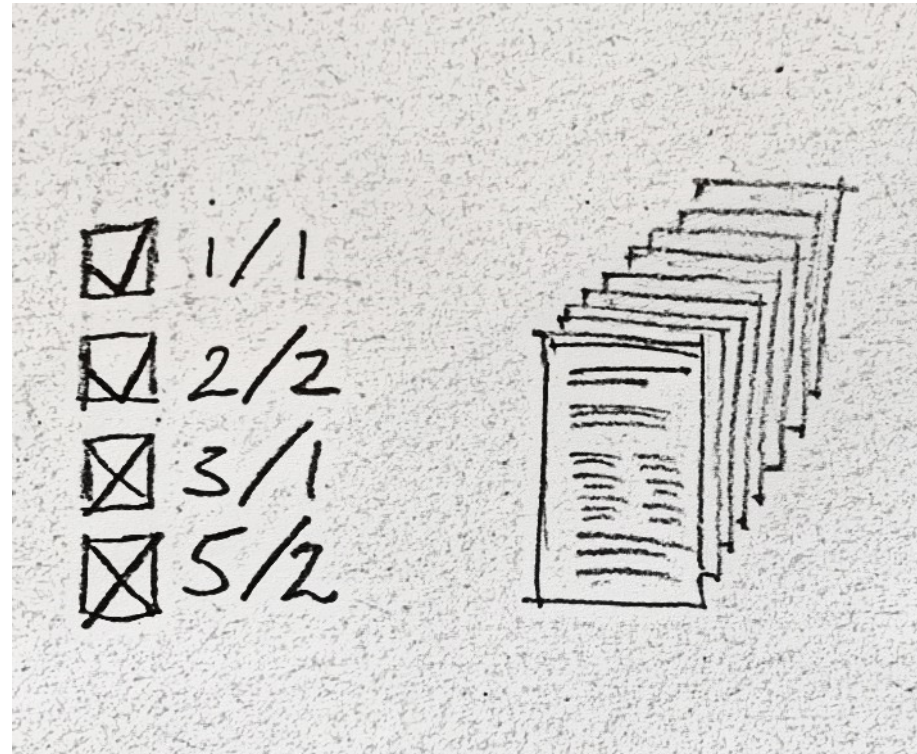
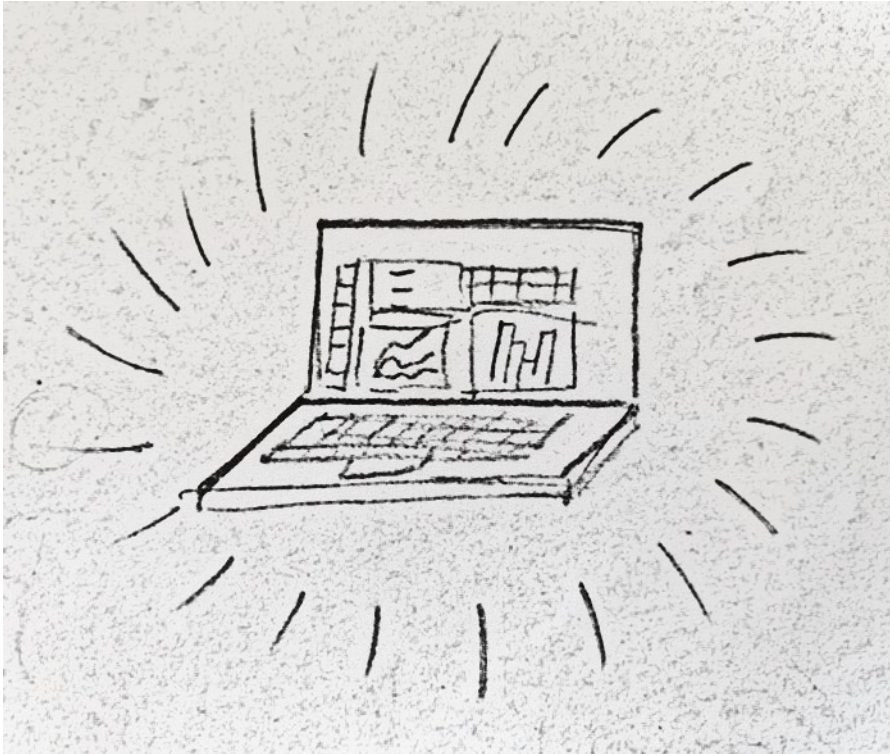
Justifies....



I. Motivation

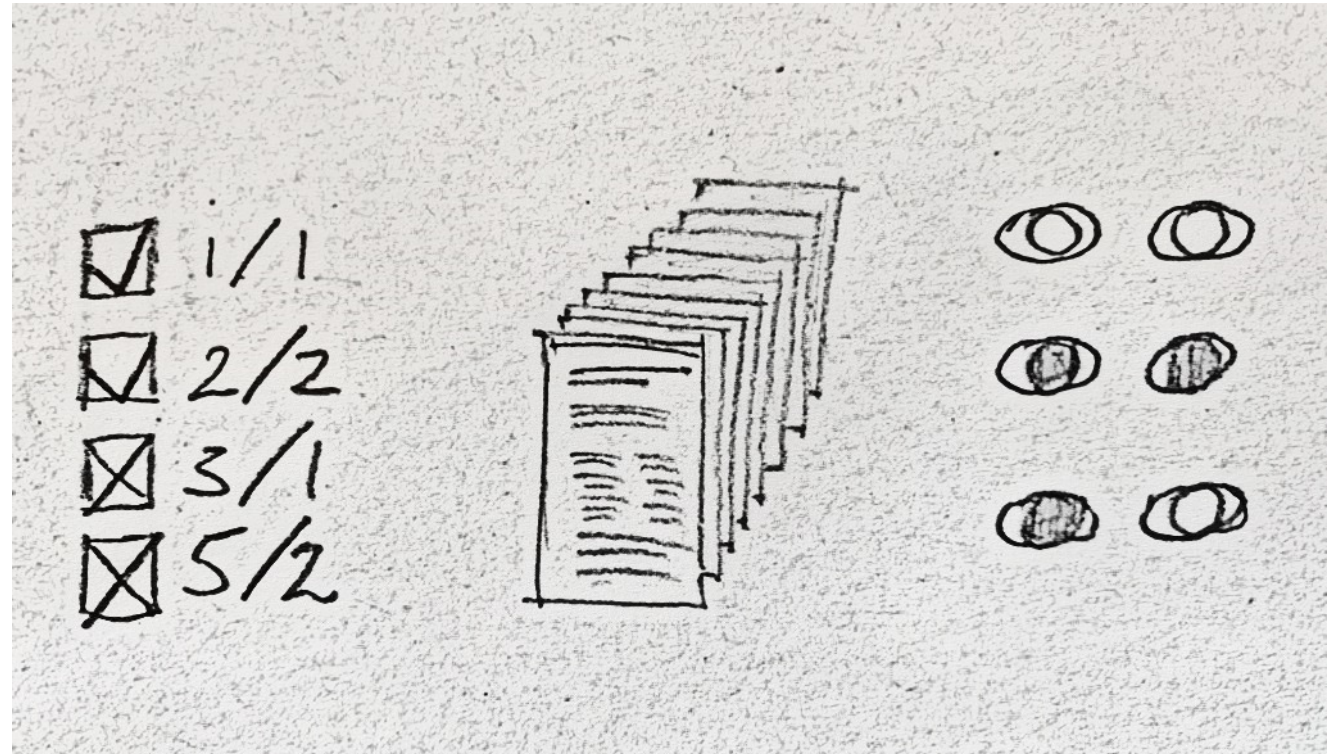
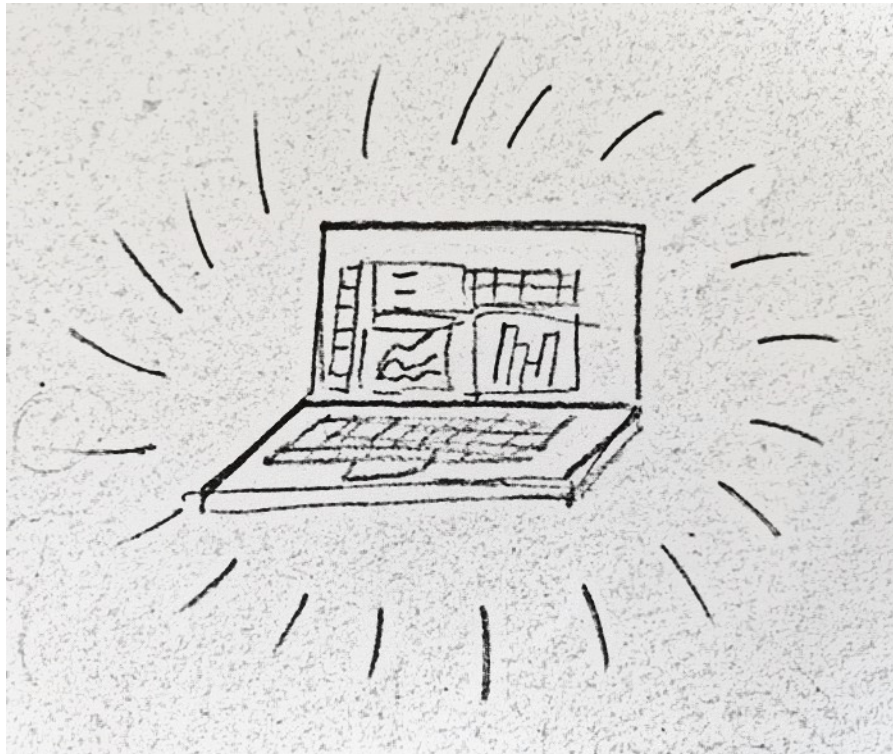
c. **Big** effort writing documentation to explain the app and the tests;

Justifies....



I. Motivation

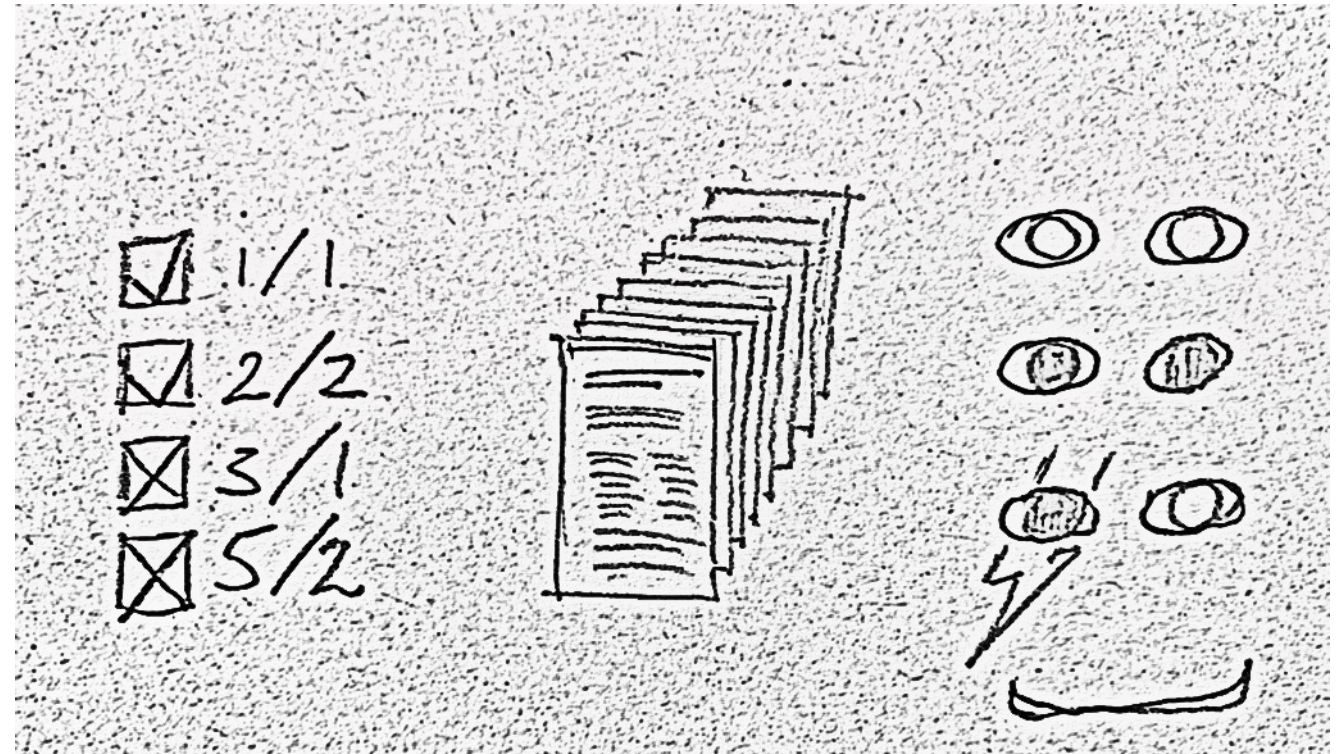
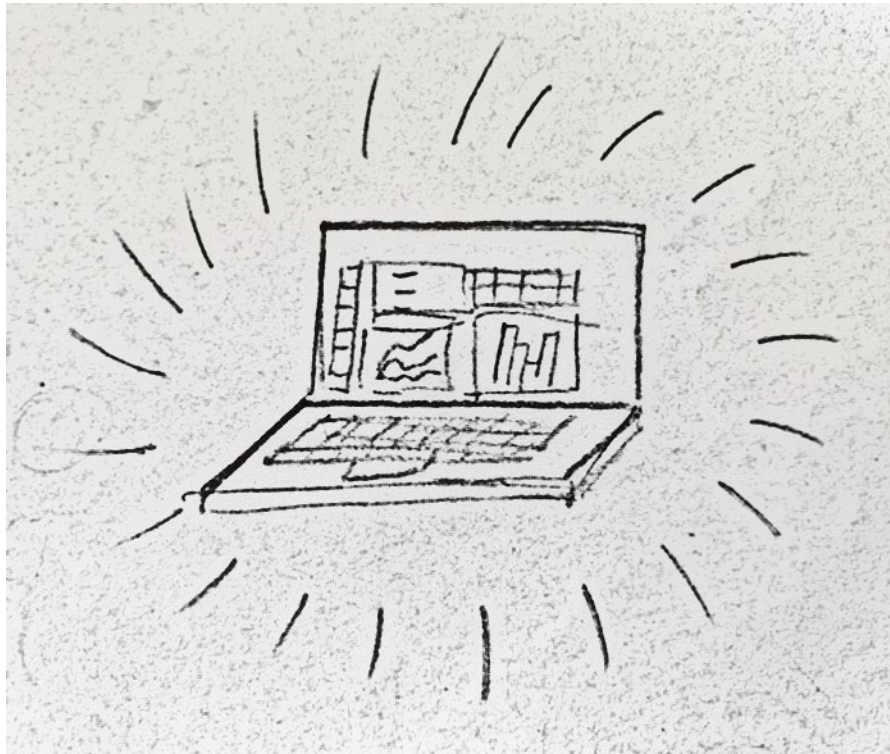
d. **Big** effort reviewing our documentation by Quality Assurance (QA) to be sure our app, testing and docs pass muster



I. Motivation

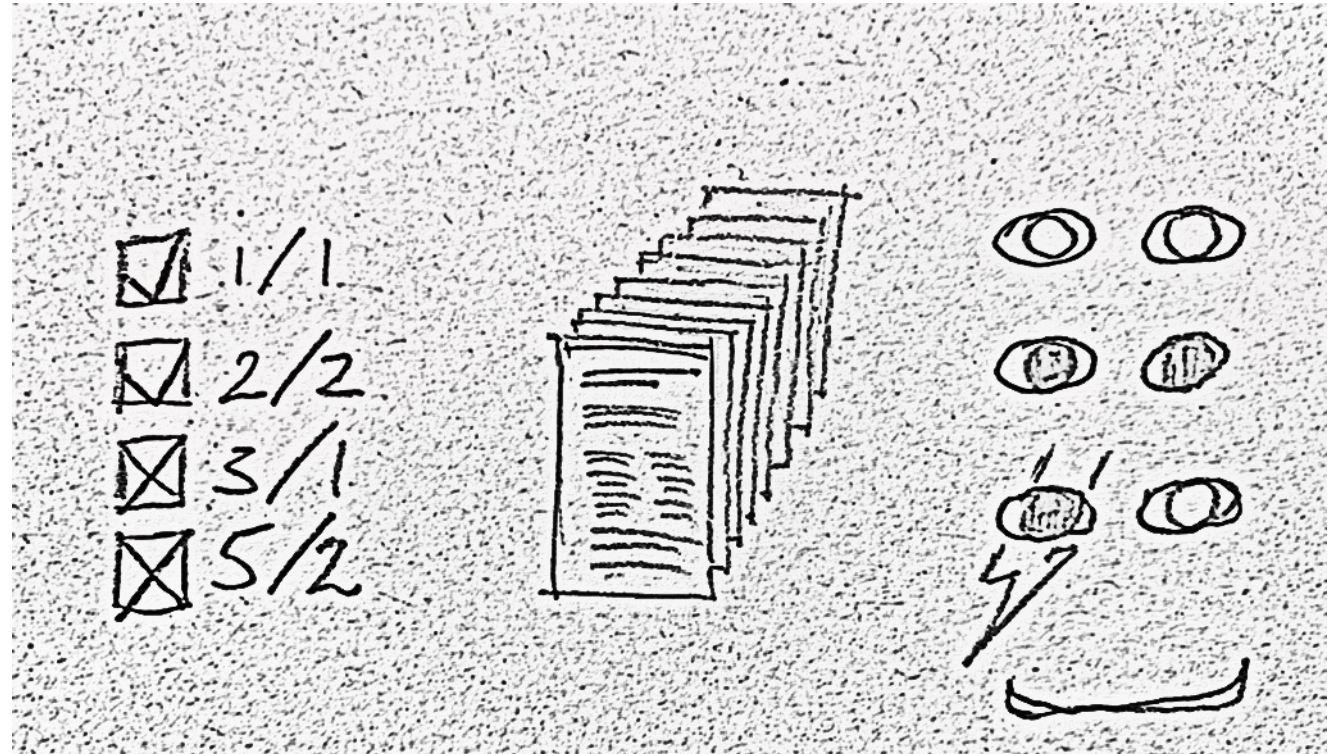
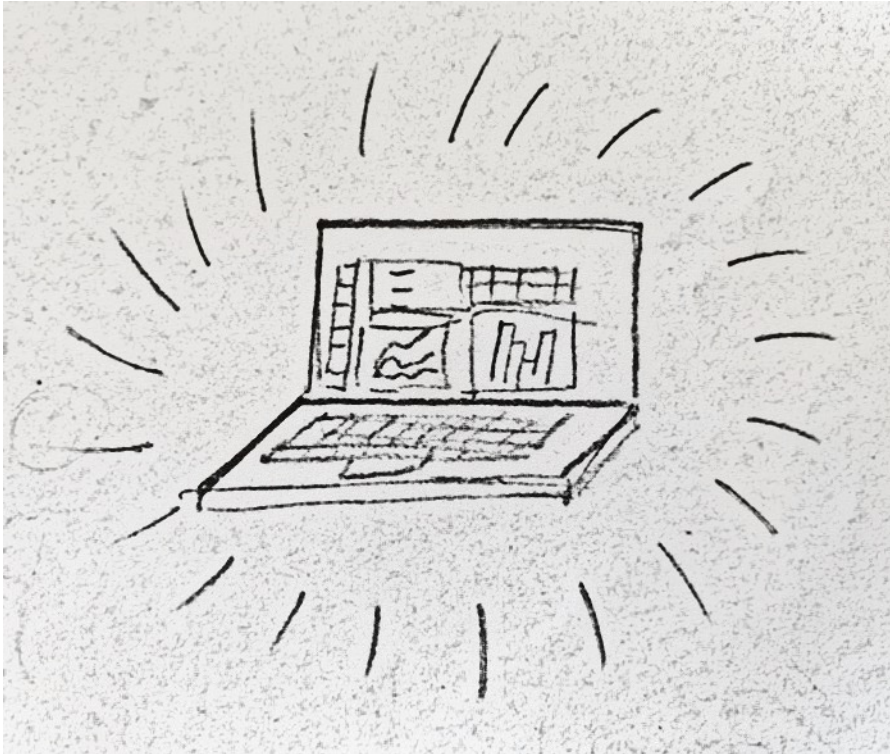
Approval! Finally, deploy and production use.

In summary: FOUR heroic efforts deliver value to business



I. Motivation

Summarize the challenge: FOUR BIG EFFORTS





Agile + GxP = Hyperloop



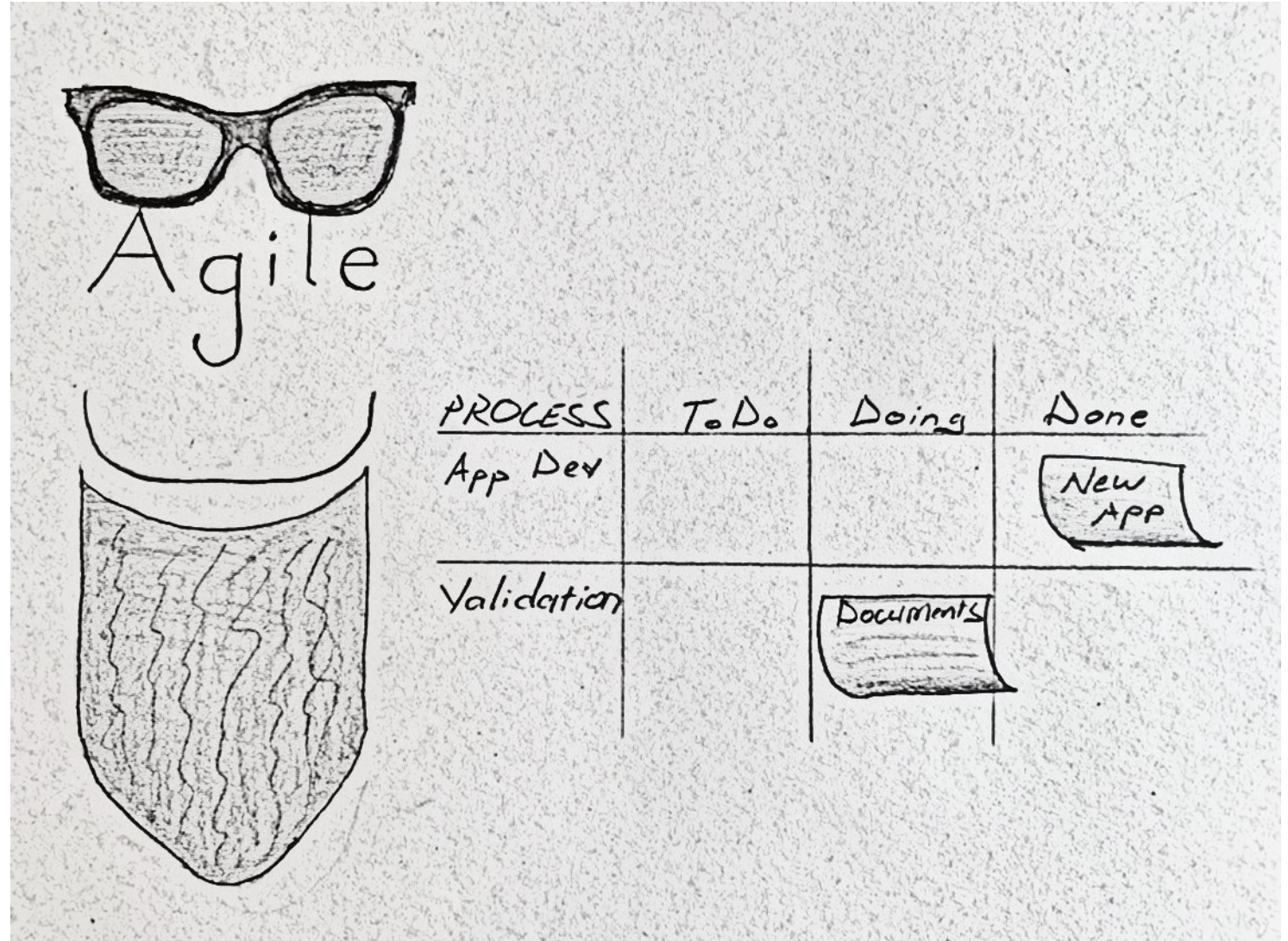
Better way:

Hyperloop!

Agile + GxP = Hyperloop

No free lunch

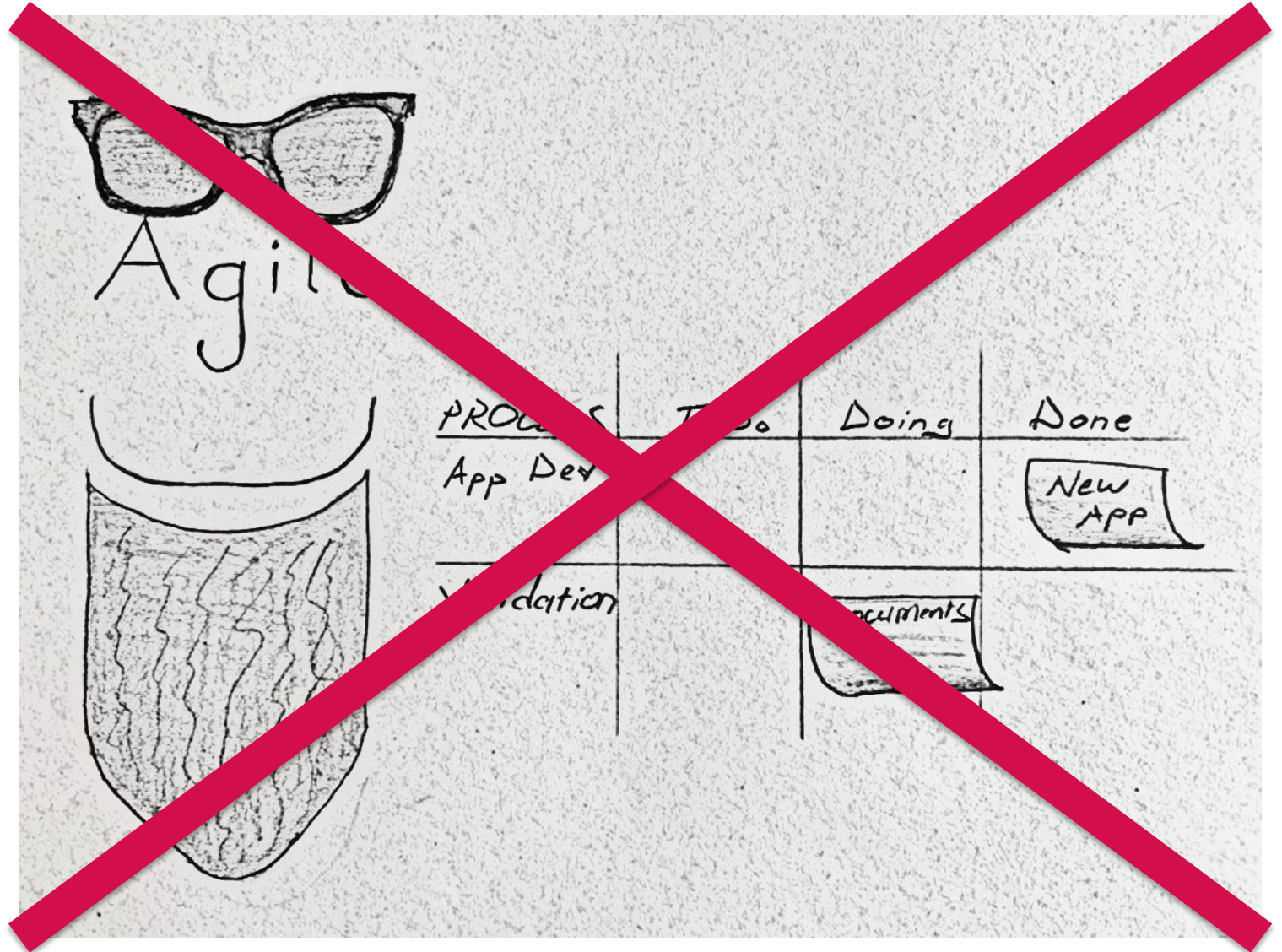
Hyperloop is not



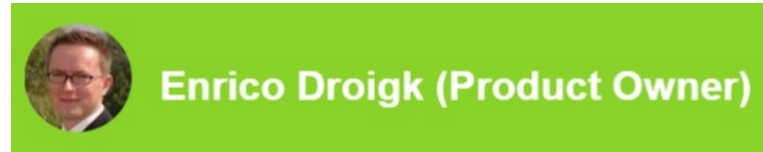
Agile + GxP = Hyperloop

No free lunch

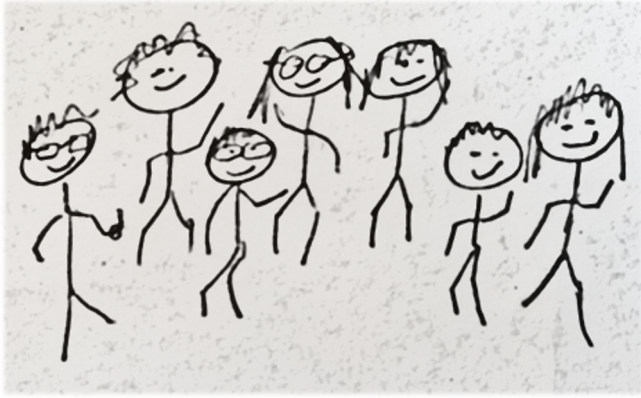
Hyperloop is not



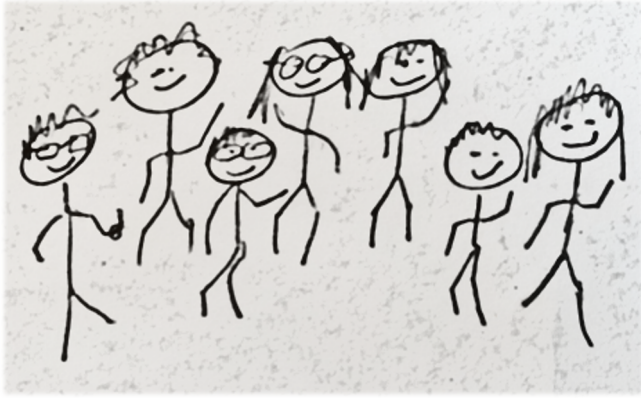
- **Hyperloop Toolchain** is a cutting-edge initiative by the Translational Science IT Team working together with a great team of **Syncwork** professionals and supported by the Research and Development QA colleagues
- Hyperloop materializes a mindset shift towards Agile methodologies & digitalization in IT product validation
- It allows teams to design, test, implement and validate their business solutions so that they become real business assets



+ many other great professionals ...

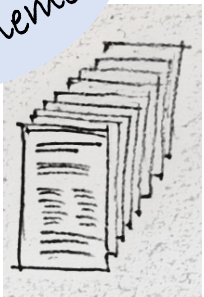


- ★ quality assurance
- ★ test manager
- ★ developer team , lead
- ★ process manager
- ★ process owner & product owner

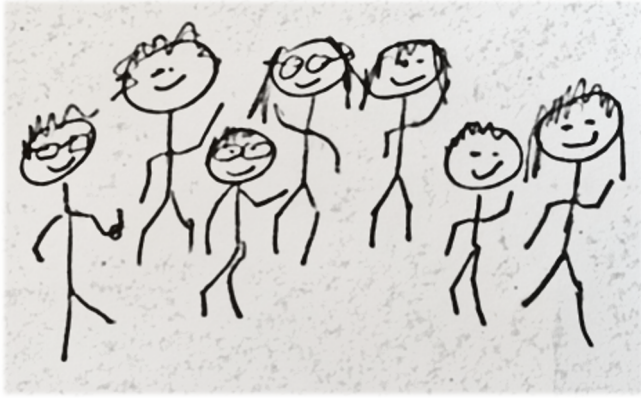


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Backlog
refinement

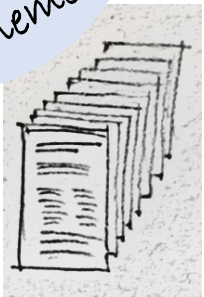


Scrum ceremony

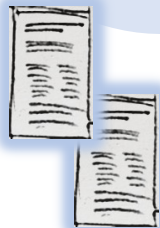


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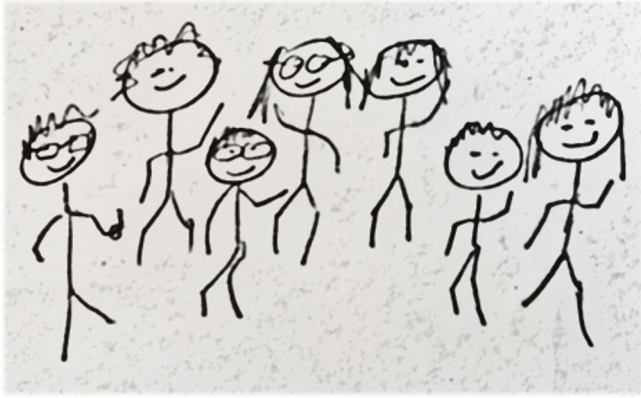
Backlog
refinement



Planning

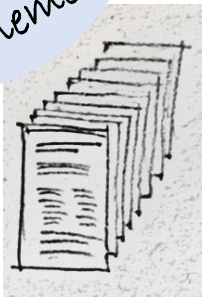


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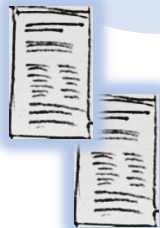


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Planning

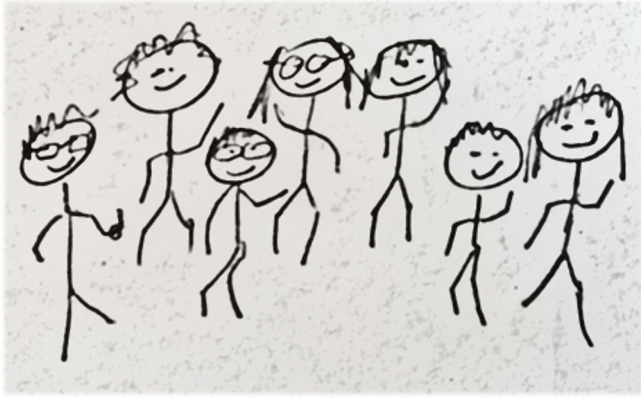


User Story

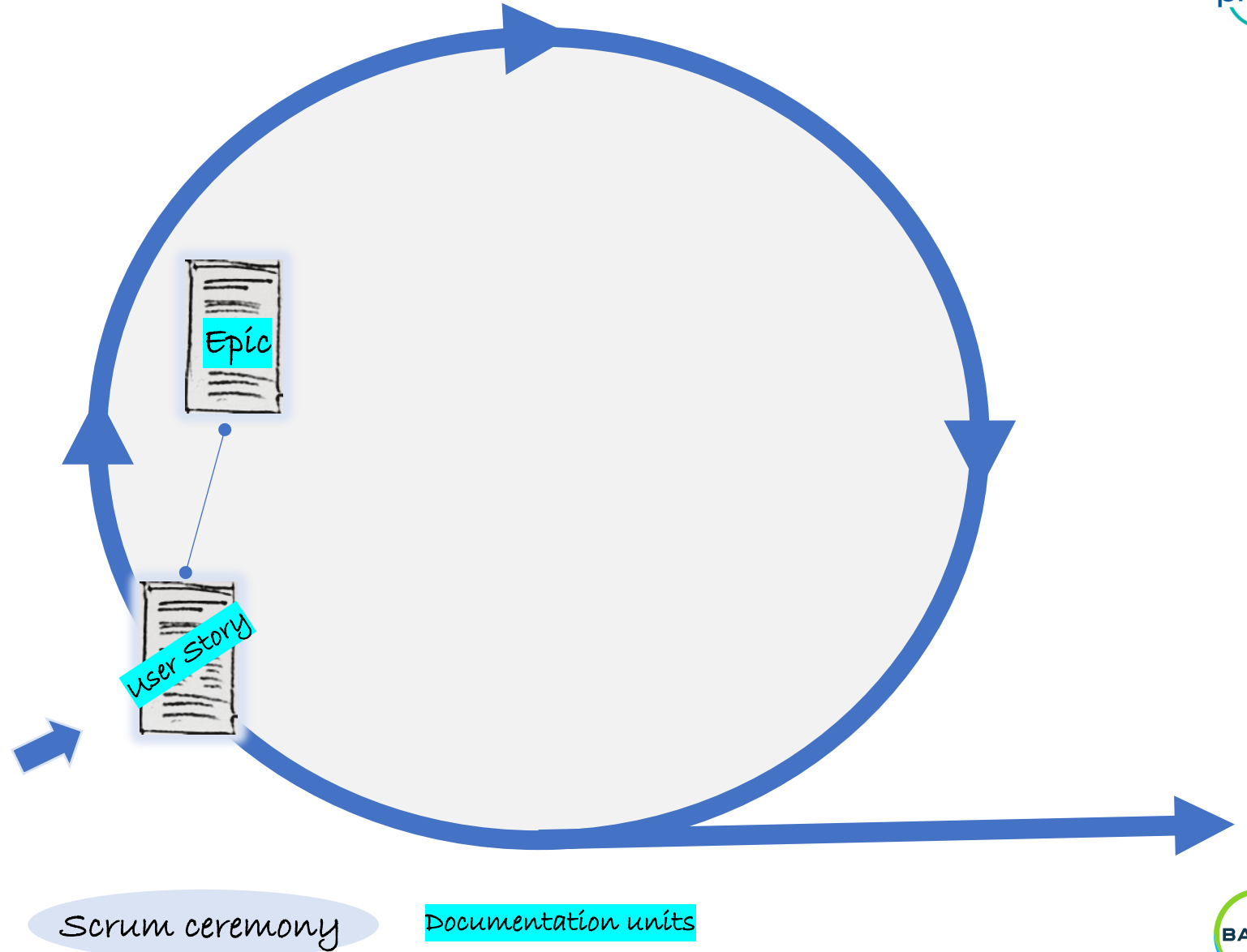


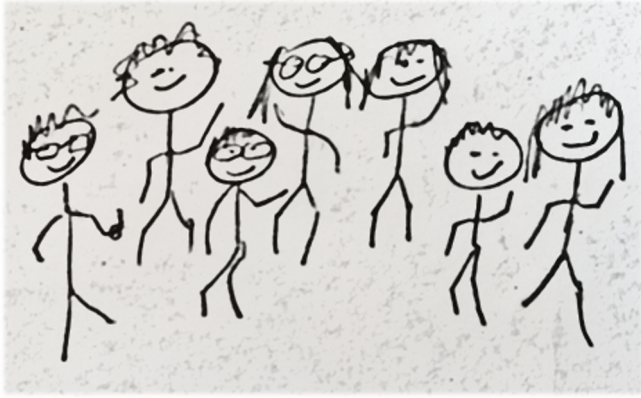
Scrum ceremony

Documentation units



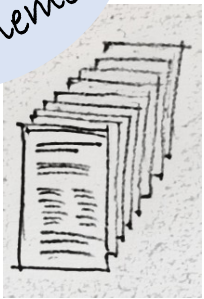
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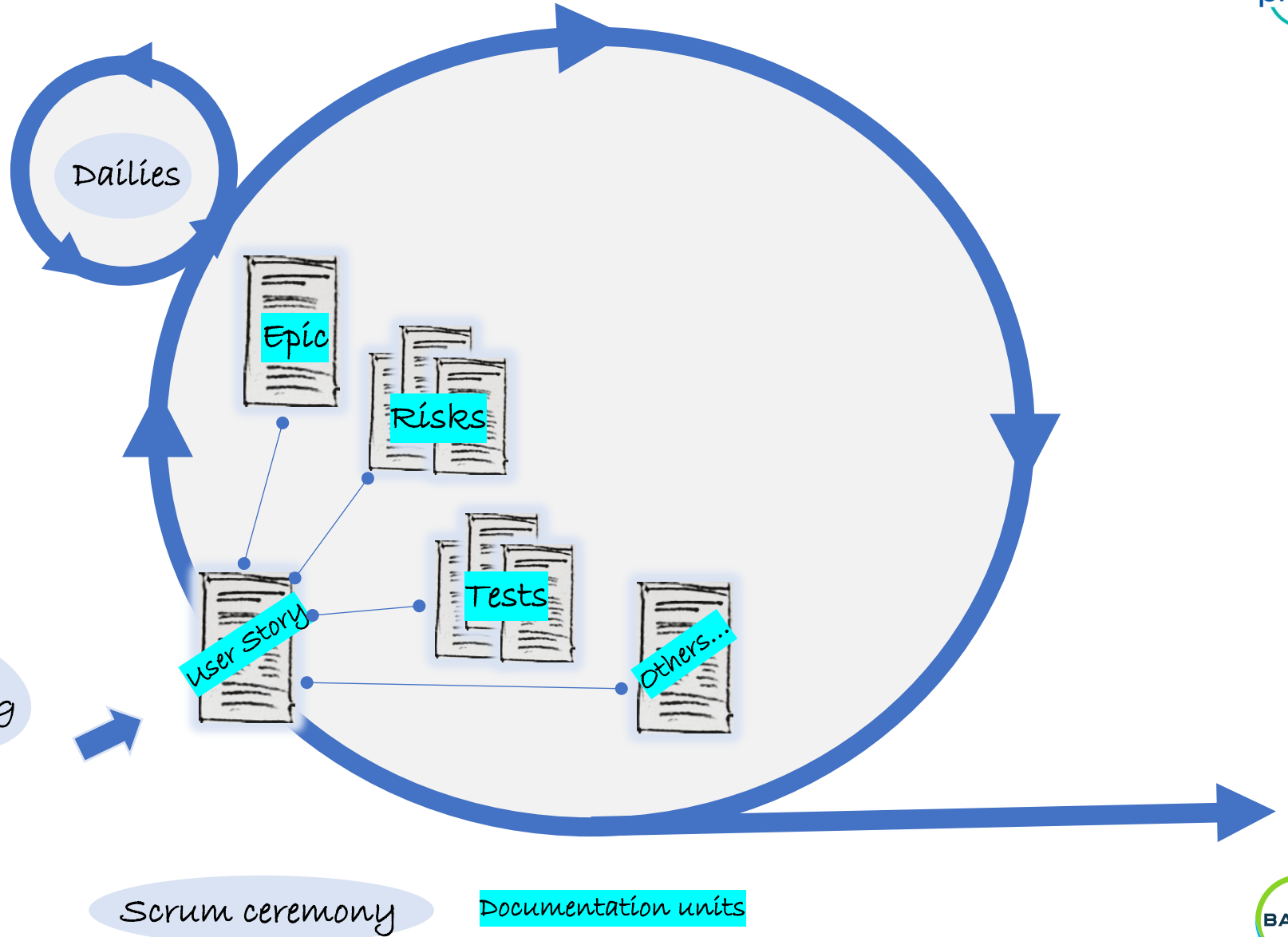
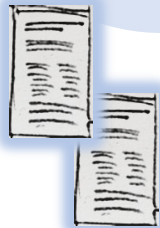


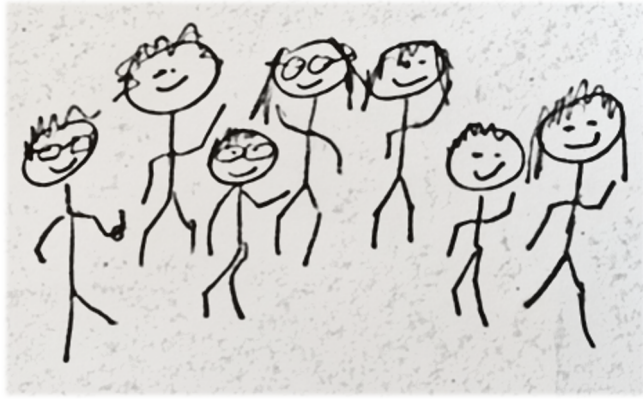
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Backlog
refinement



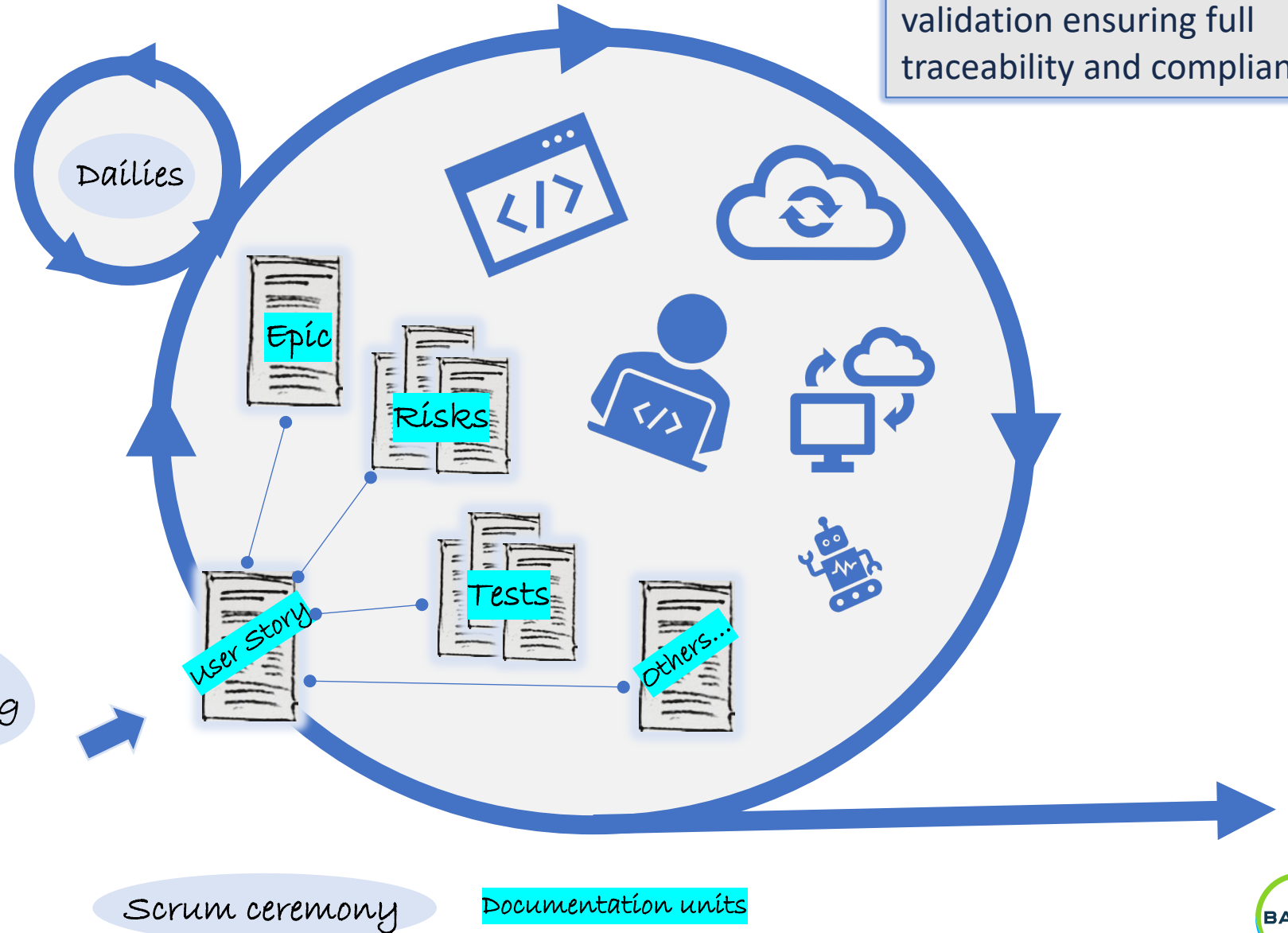
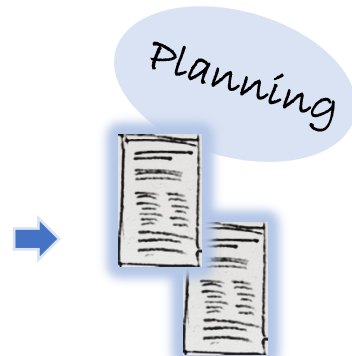
Planning

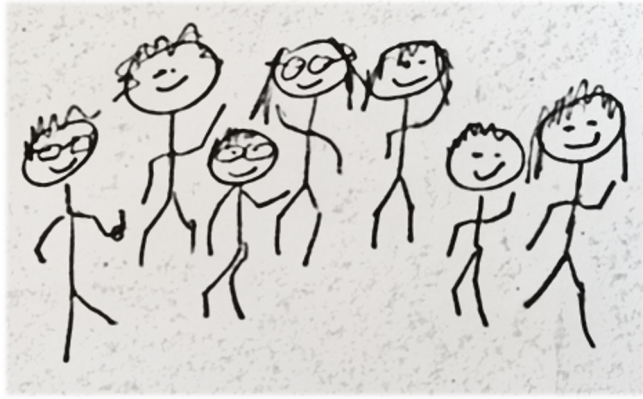




Parallel and systematic software development and validation ensuring full traceability and compliance

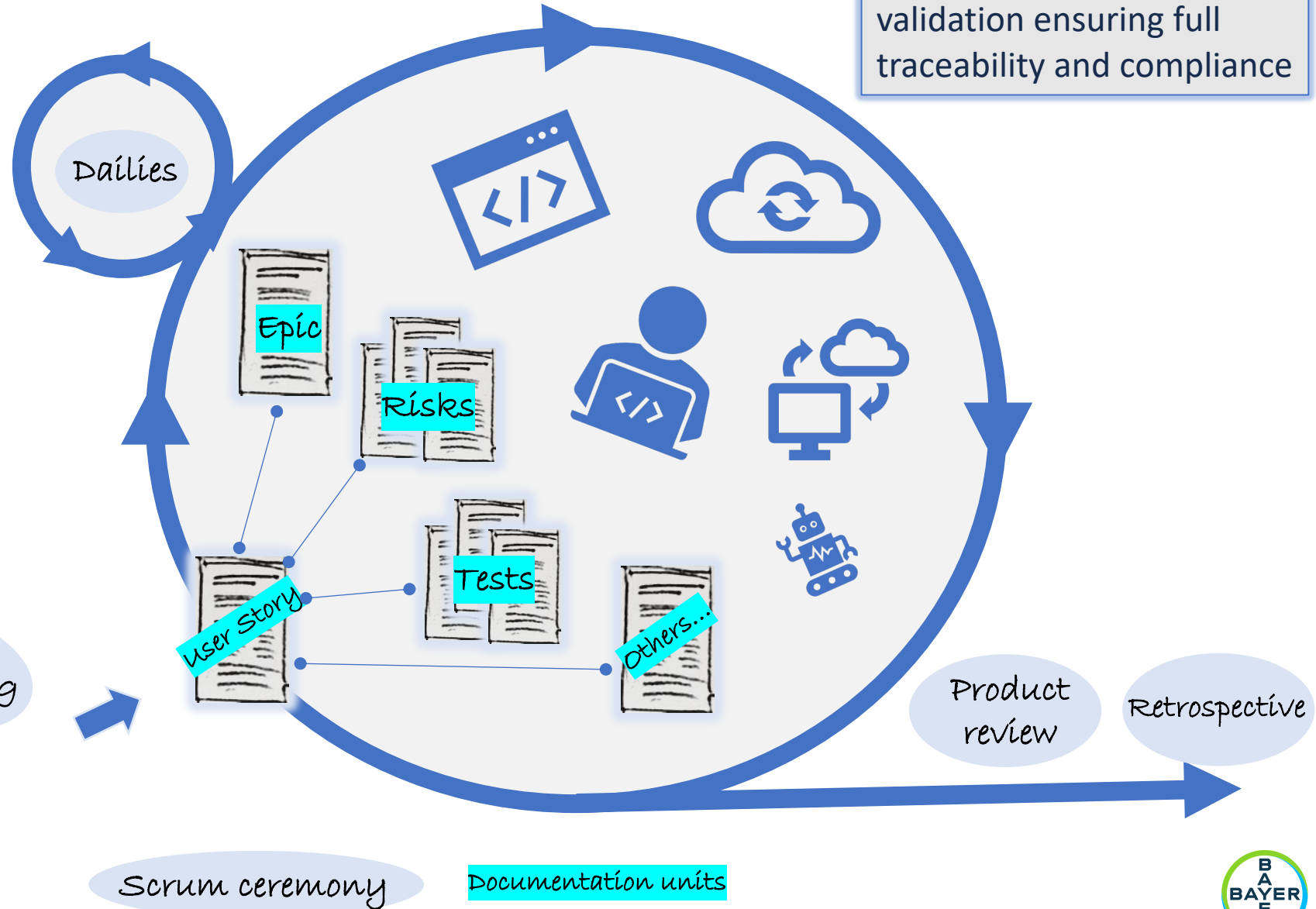
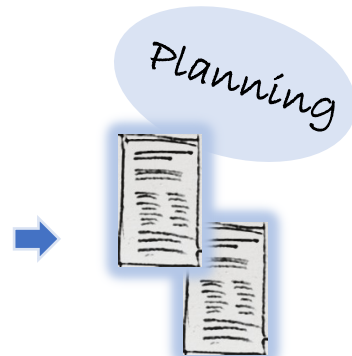
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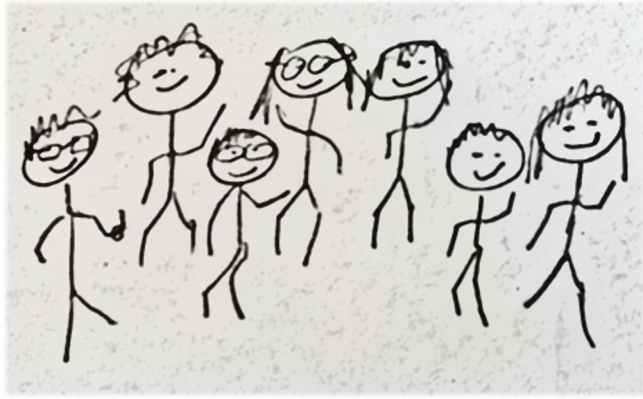




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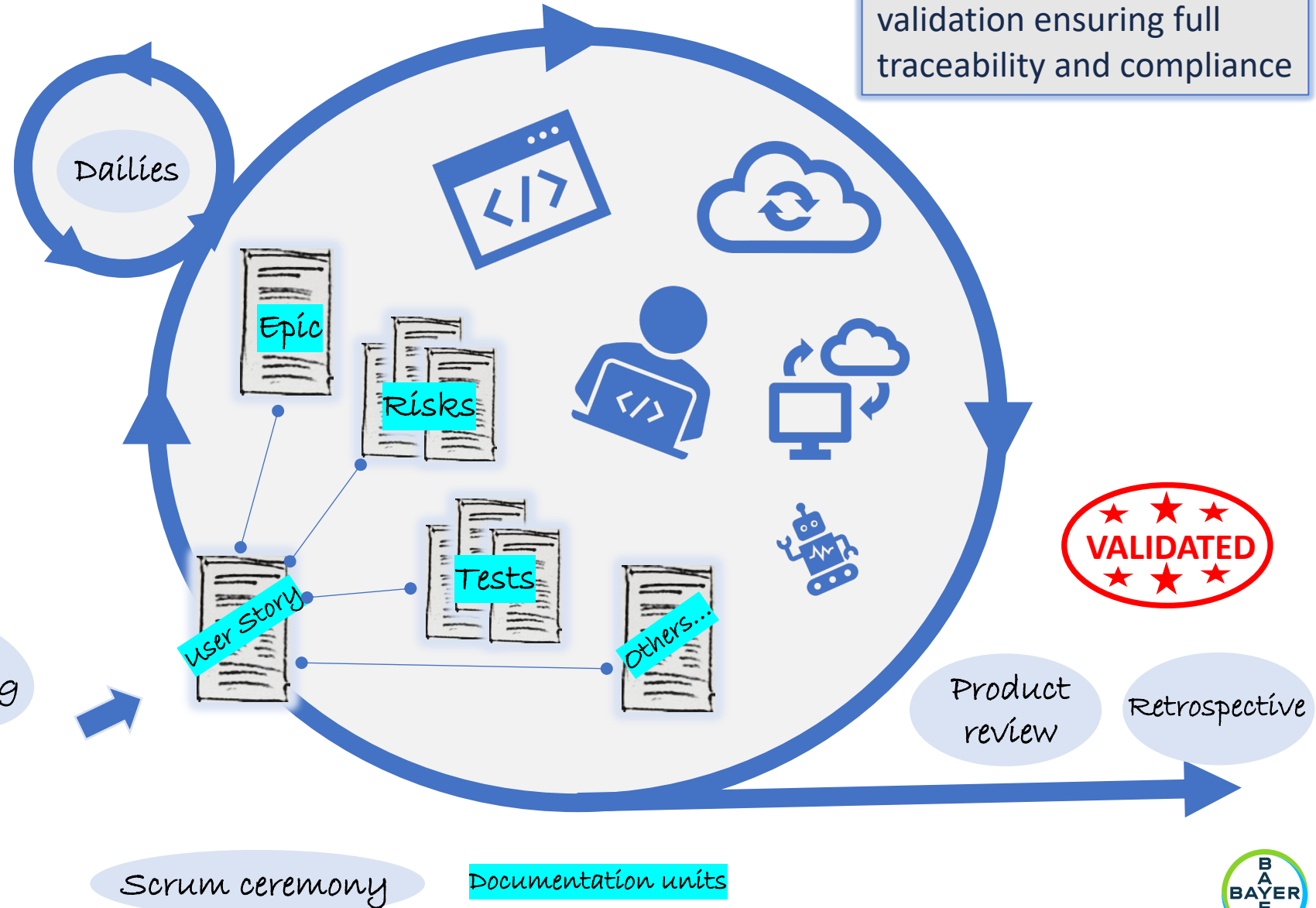
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Parallel and systematic software development and validation ensuring full traceability and compliance

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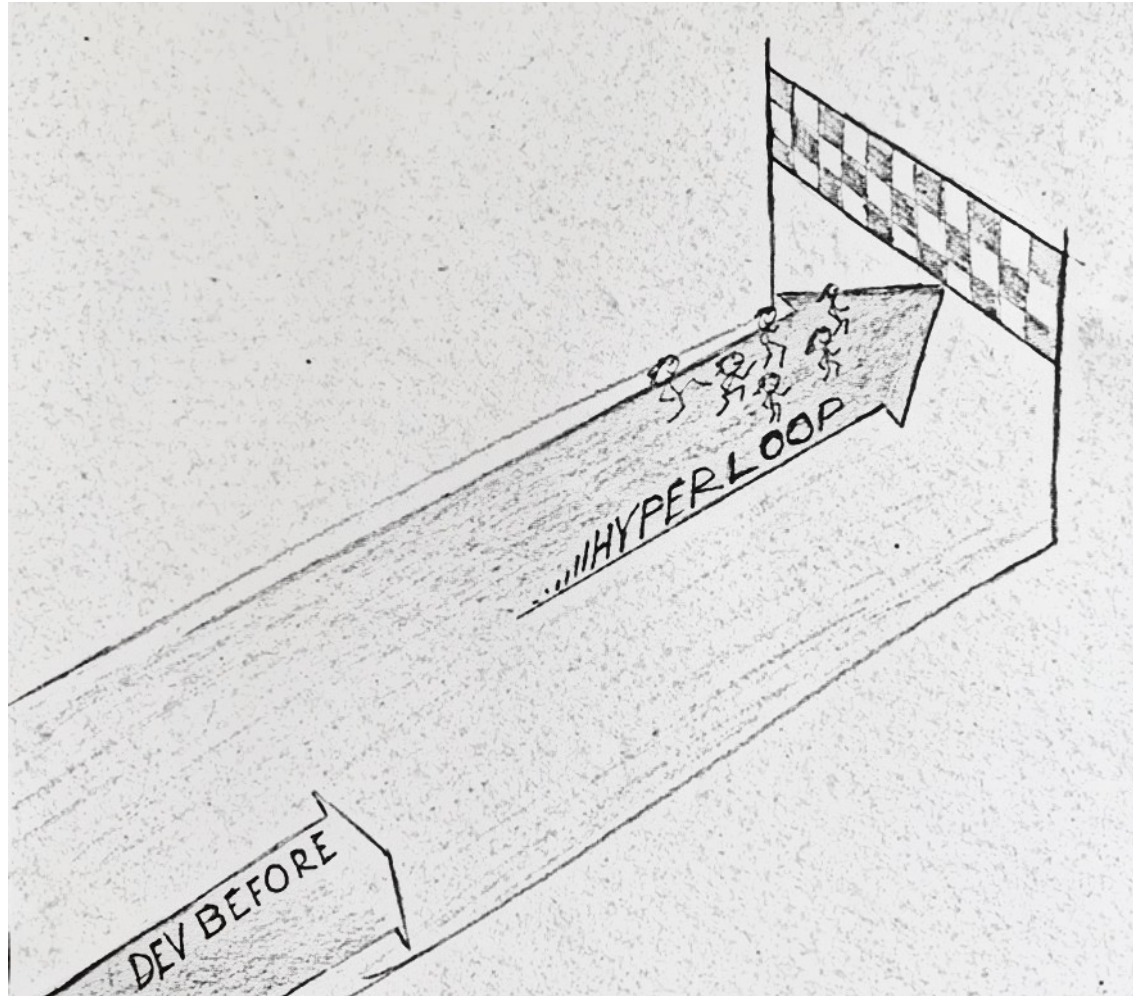




III. Business Value

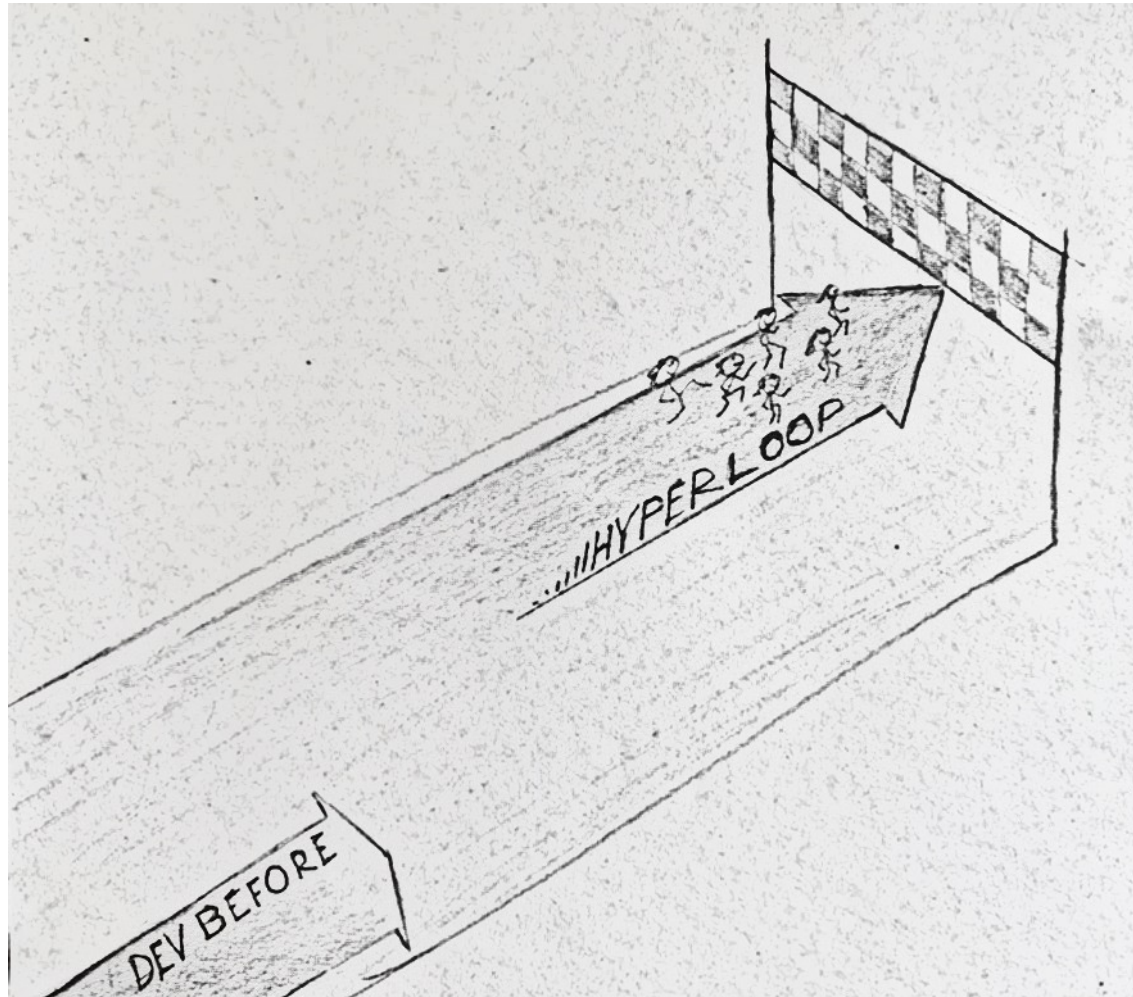


III. Business Value



FASTER

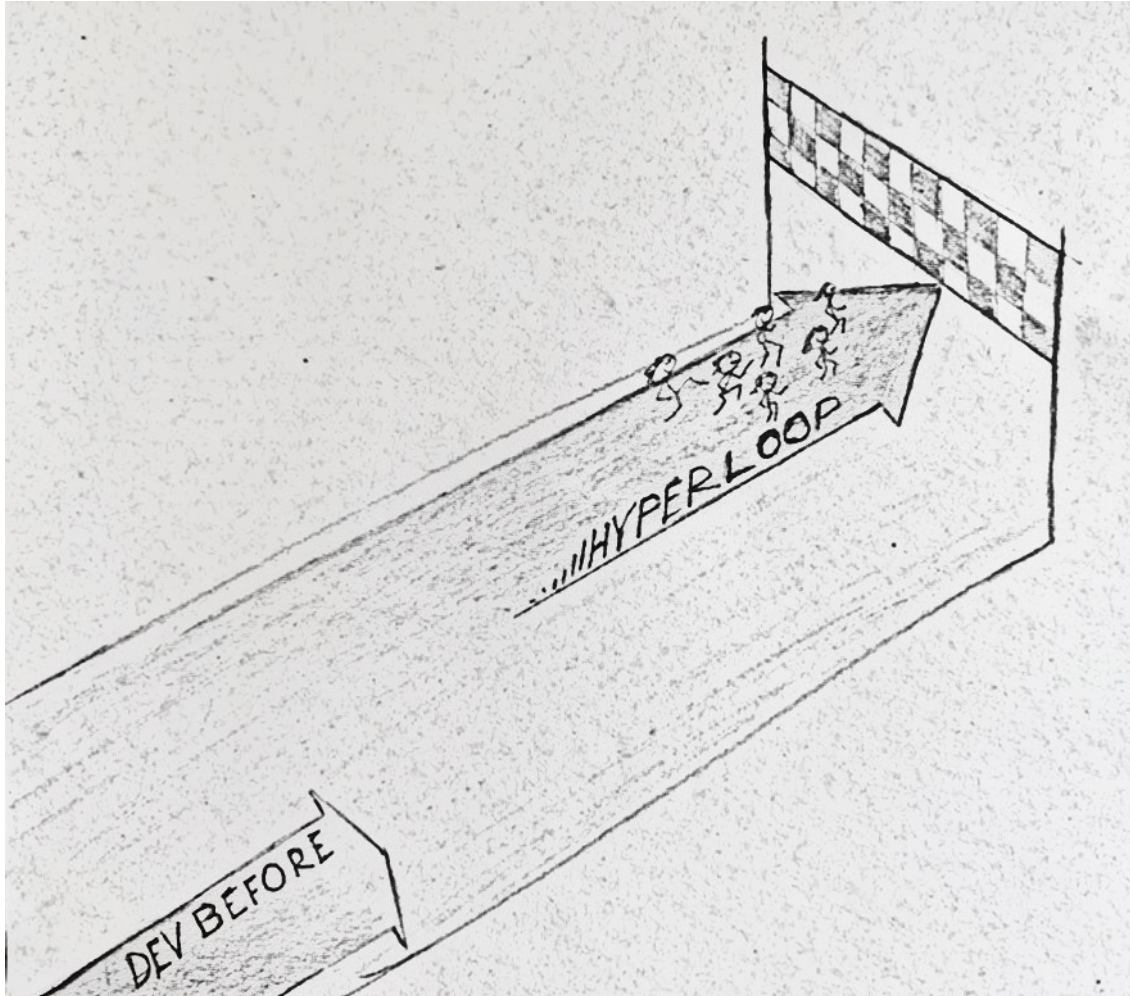
III. Business Value



FASTER

1. Development on rails

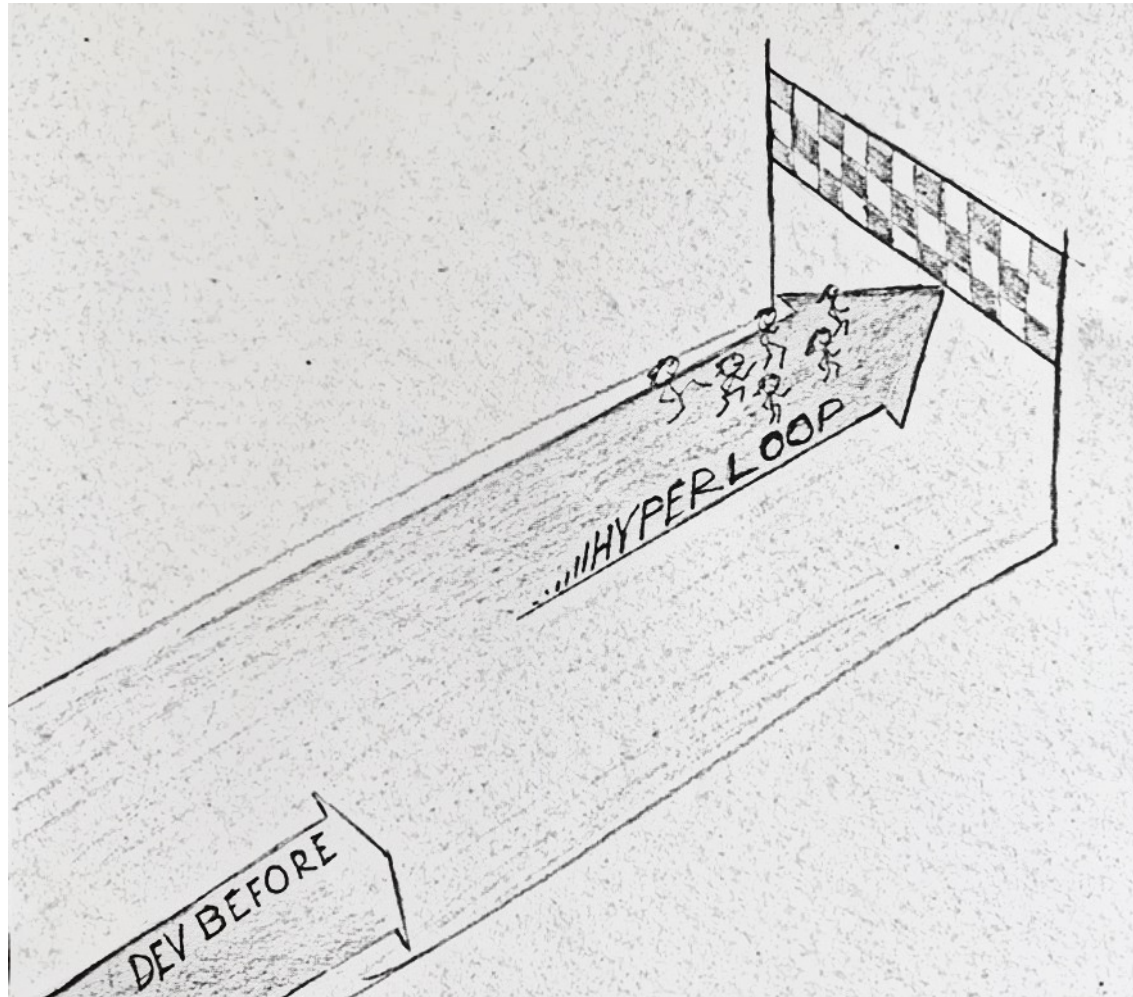
III. Business Value



FASTER

1. Development on rails
2. Instant feedback

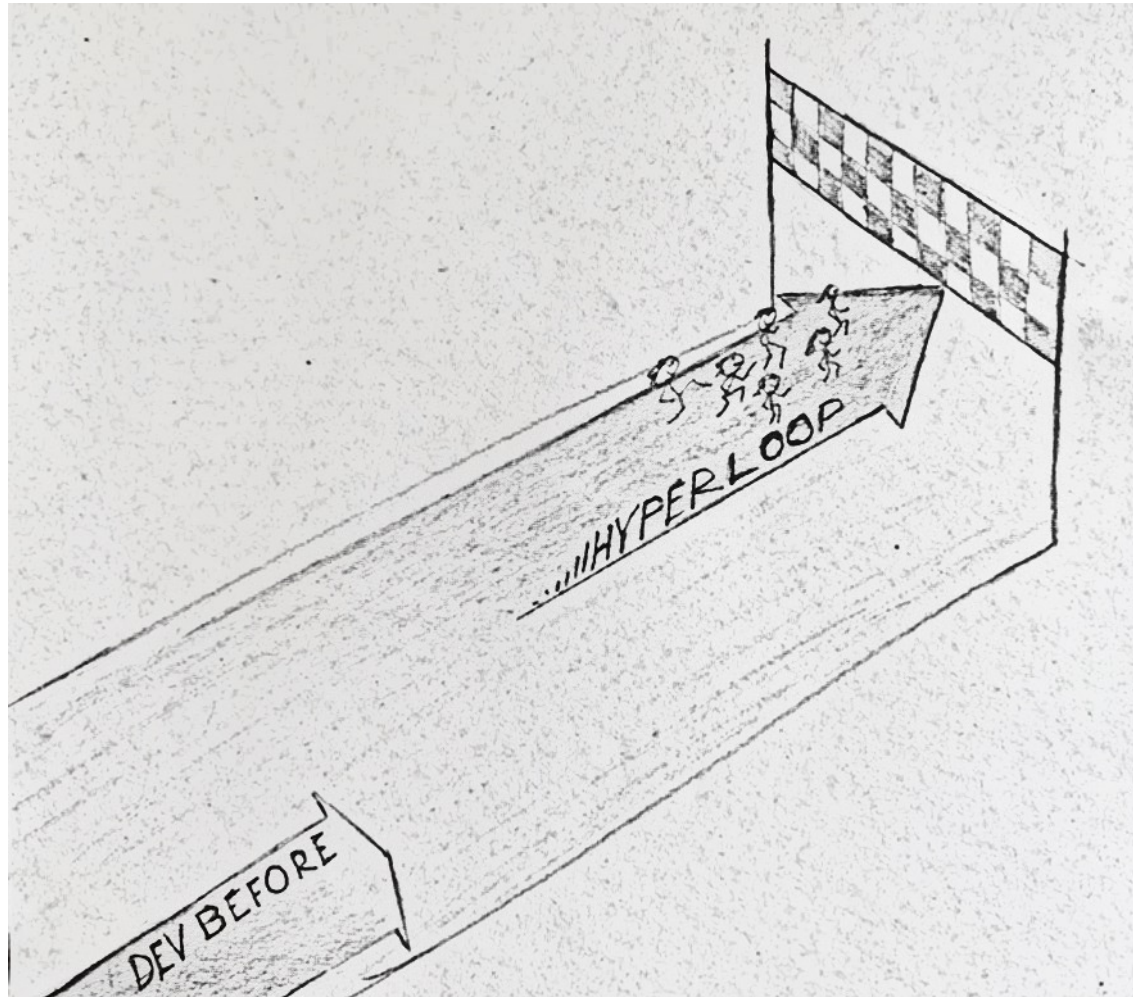
III. Business Value



FASTER

1. Development on rails
2. Instant feedback
3. Oops!

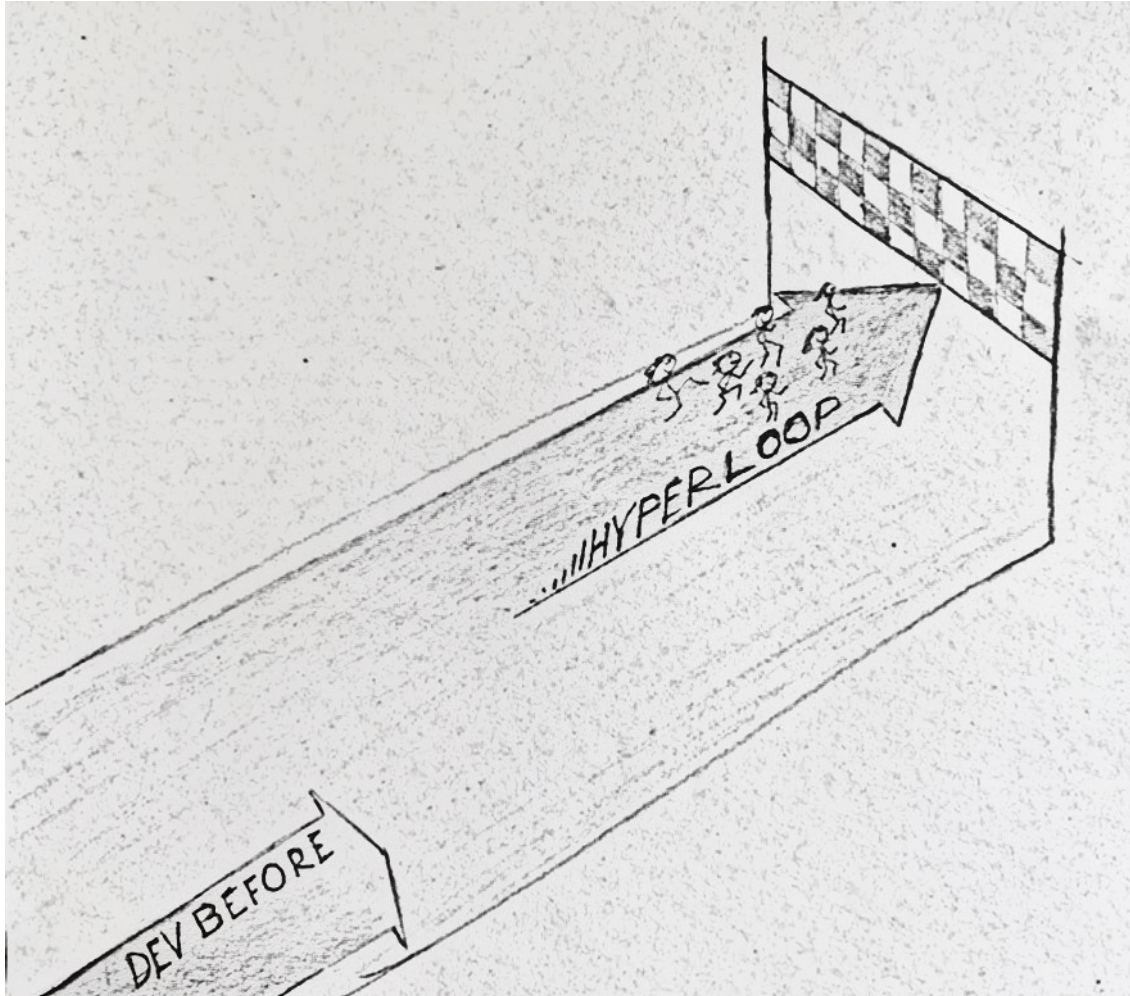
III. Business Value



FASTER

1. Development on rails
2. Instant feedback
3. Oops!
4. Automation

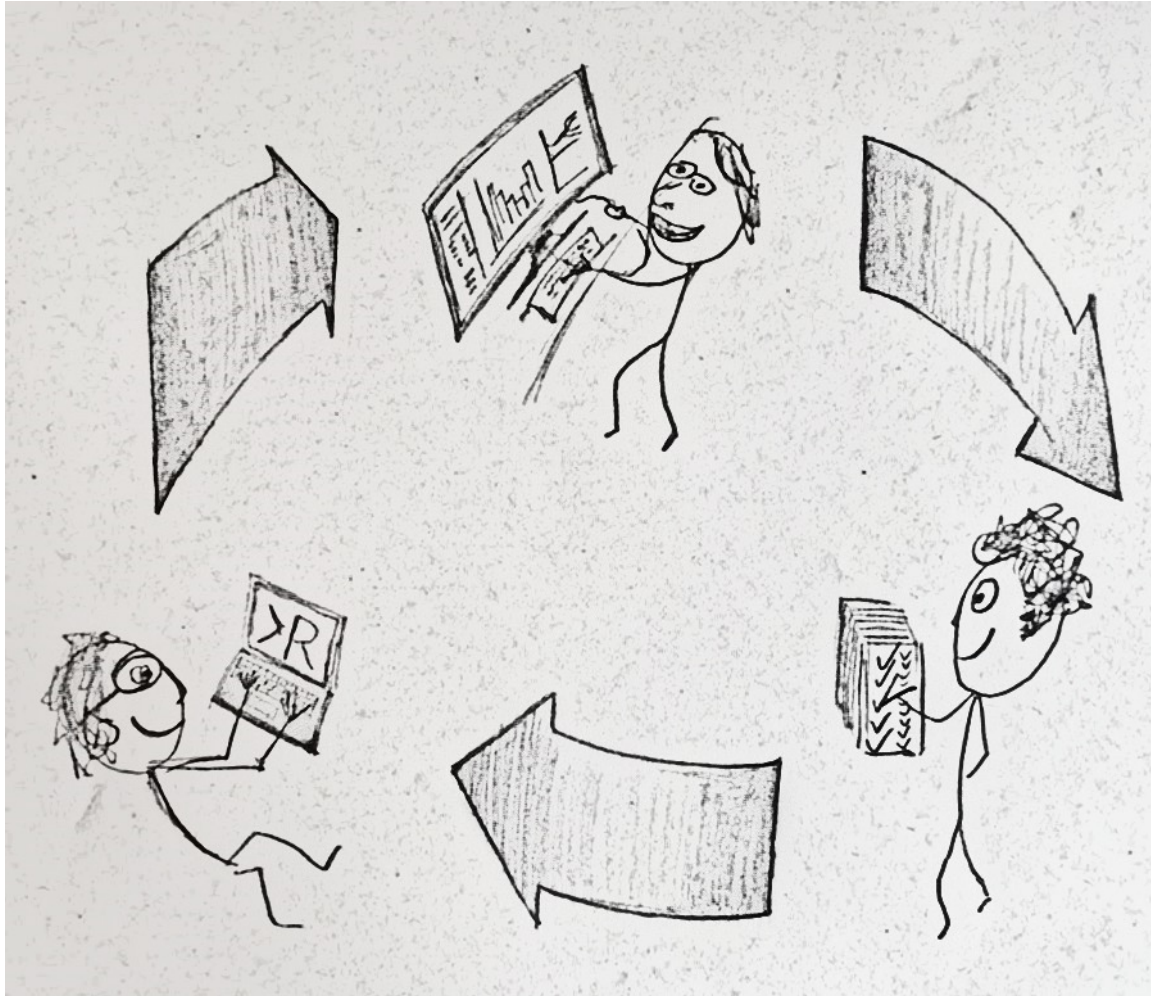
III. Business Value



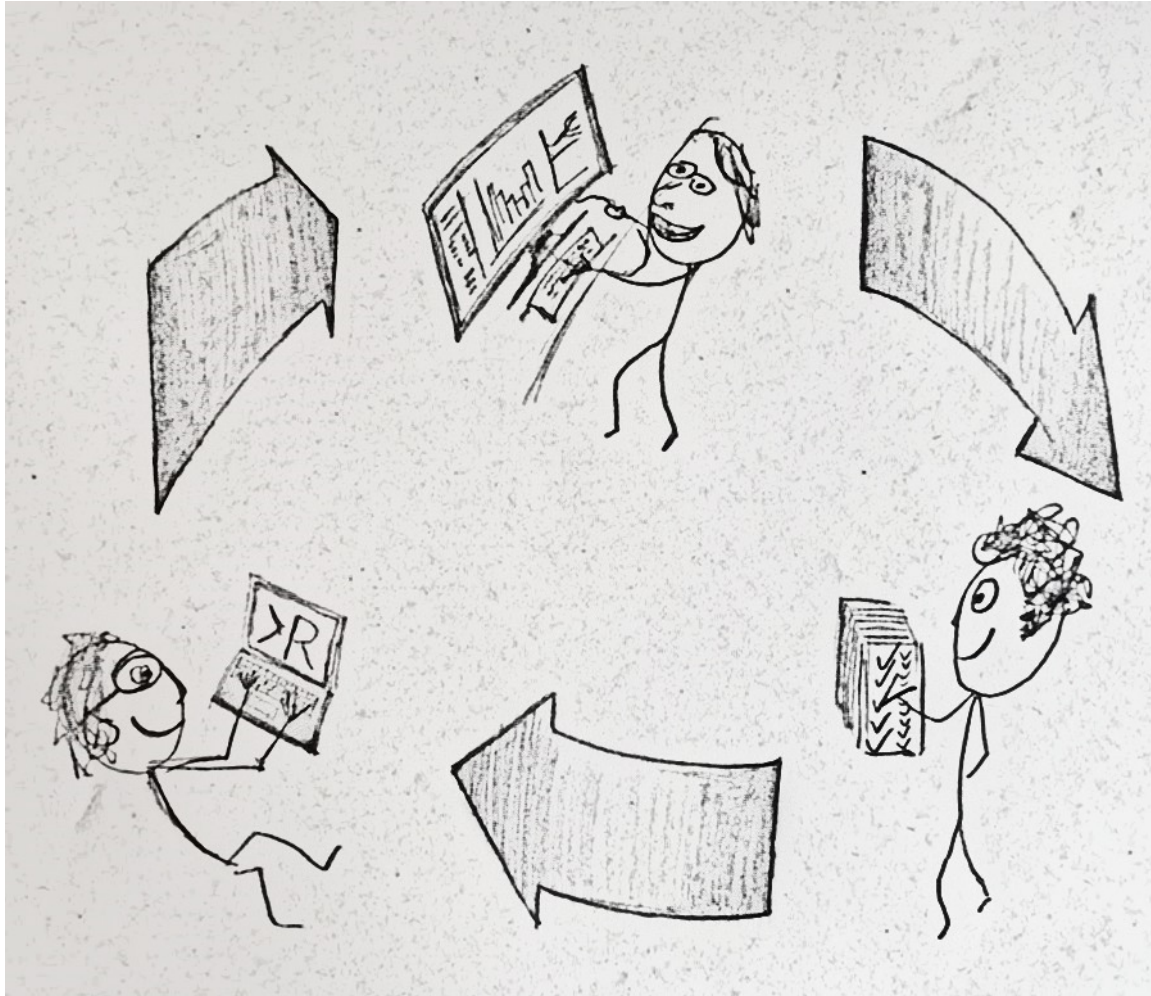
FASTER

1. Development on rails
2. Instant feedback
3. Oops!
4. Automation
5. Pivot

III. Business Value



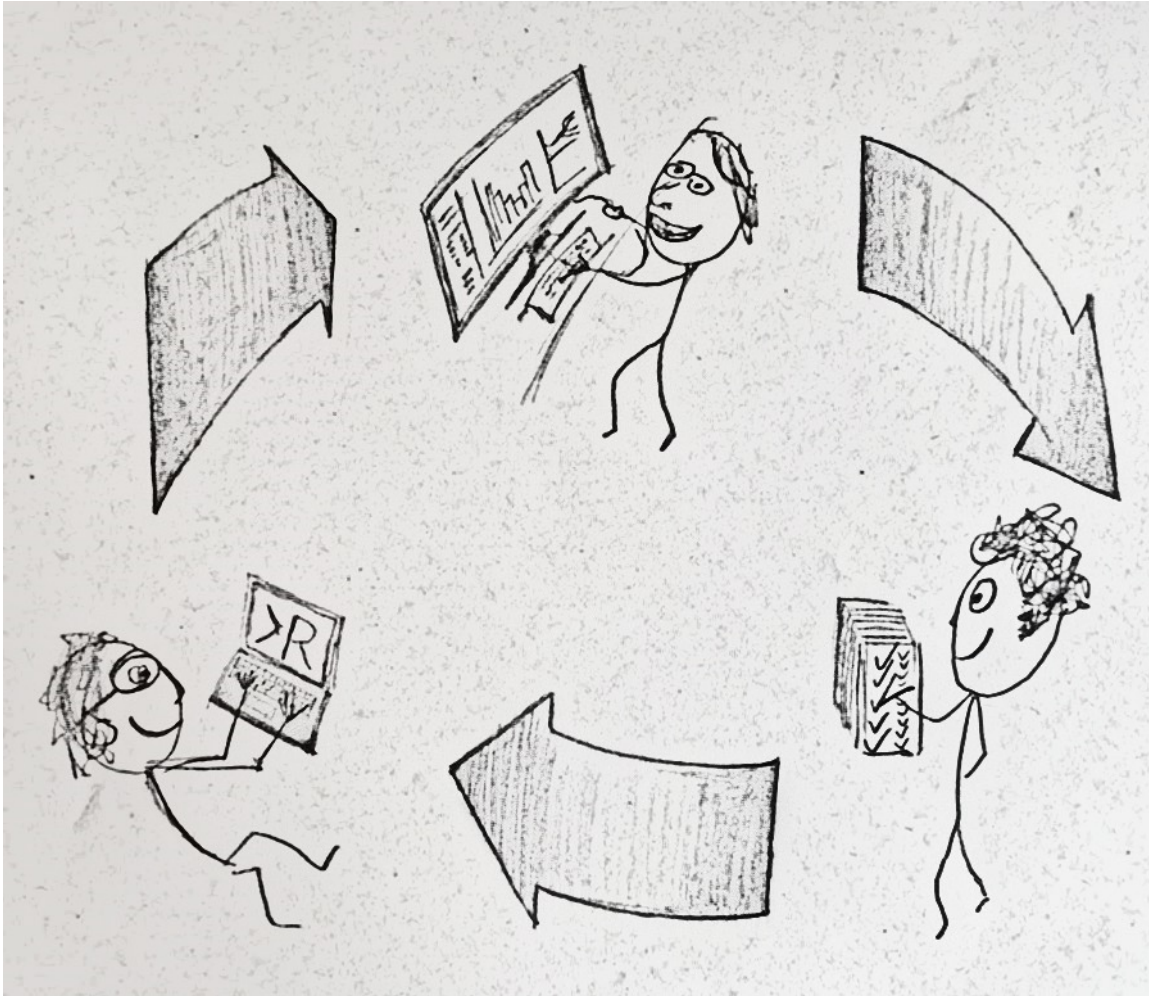
FUNNER



FUNNER

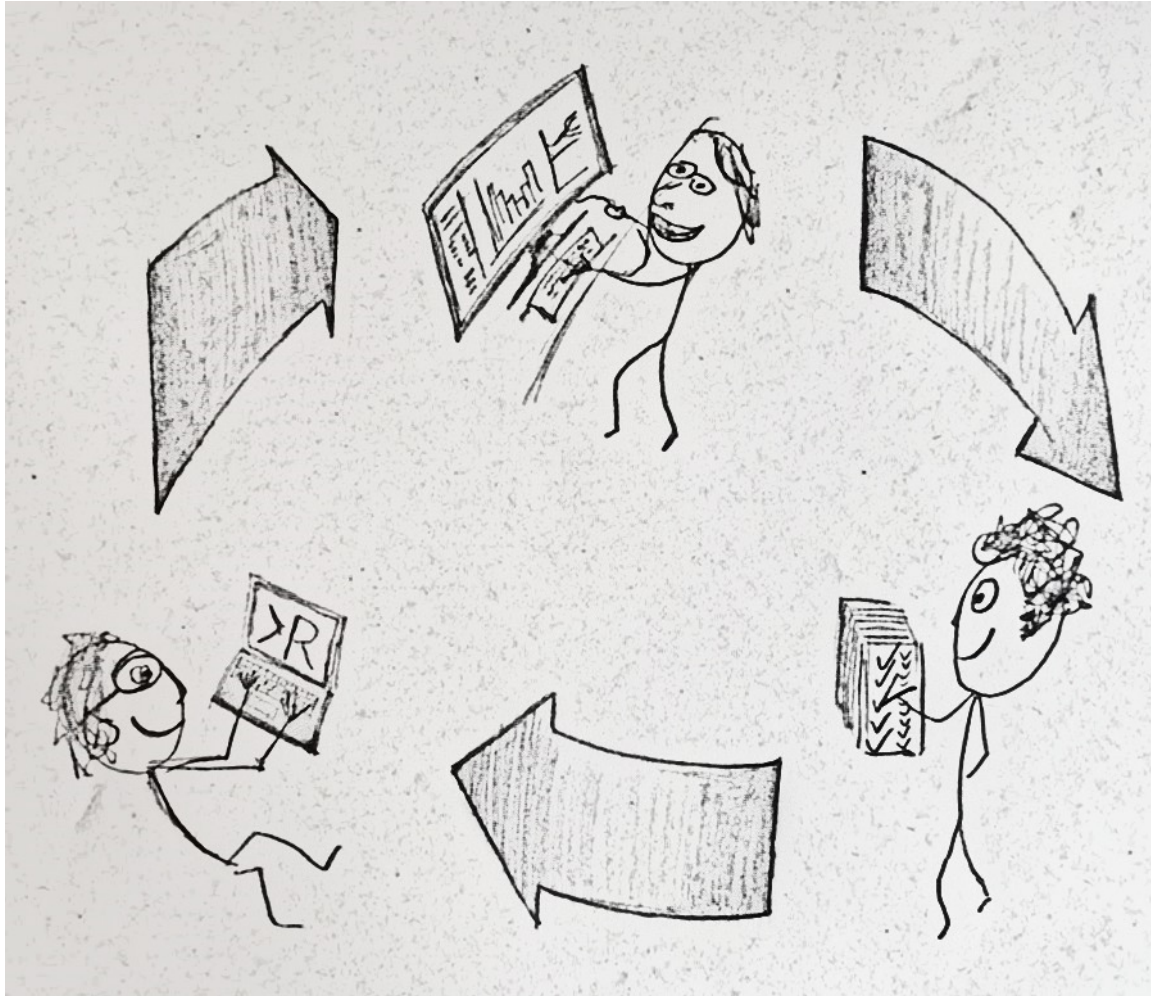
1. Clarity

III. Business Value



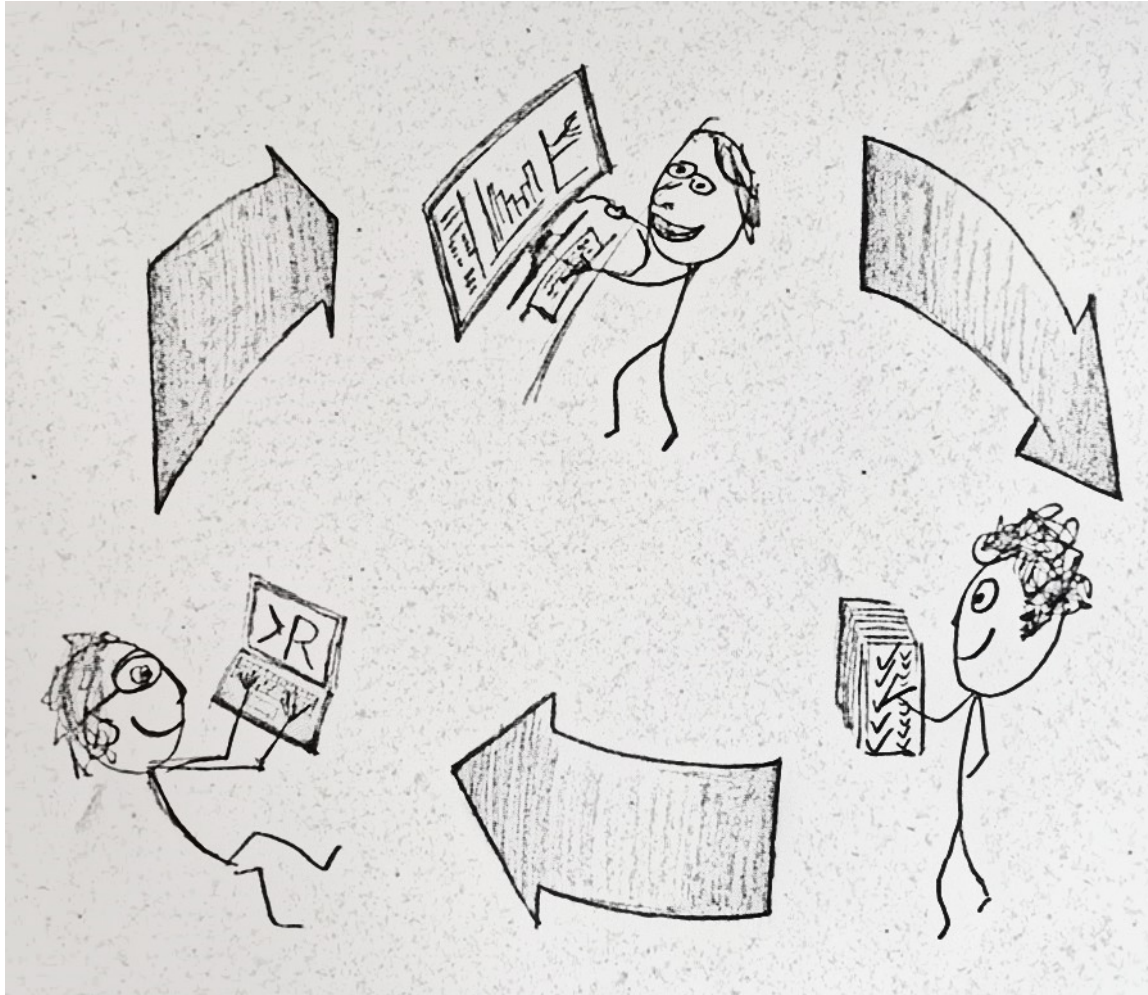
FUNNER

1. Clarity
2. Accountability



FUNNER

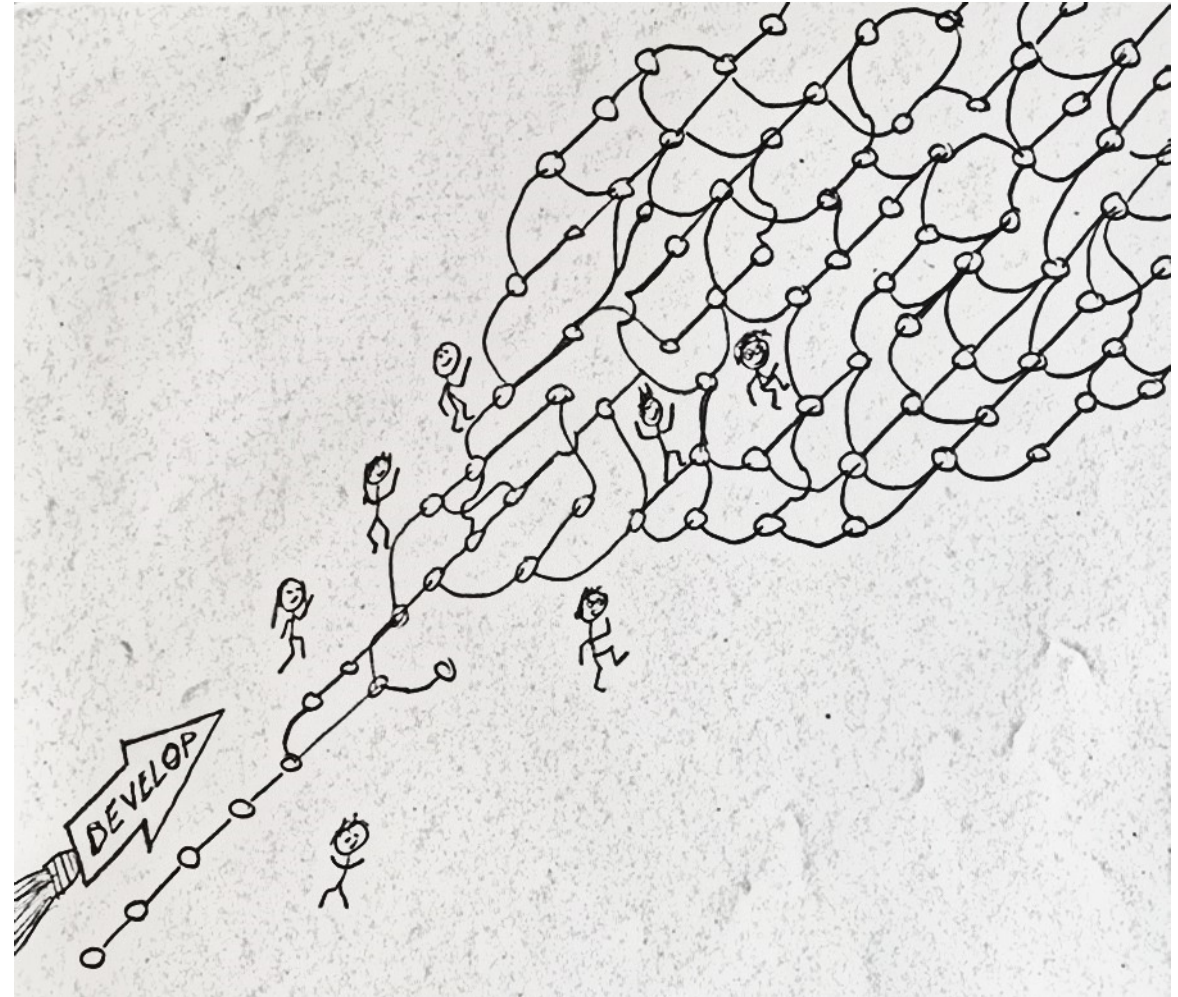
1. Clarity
2. Accountability
3. Organization



FUNNER

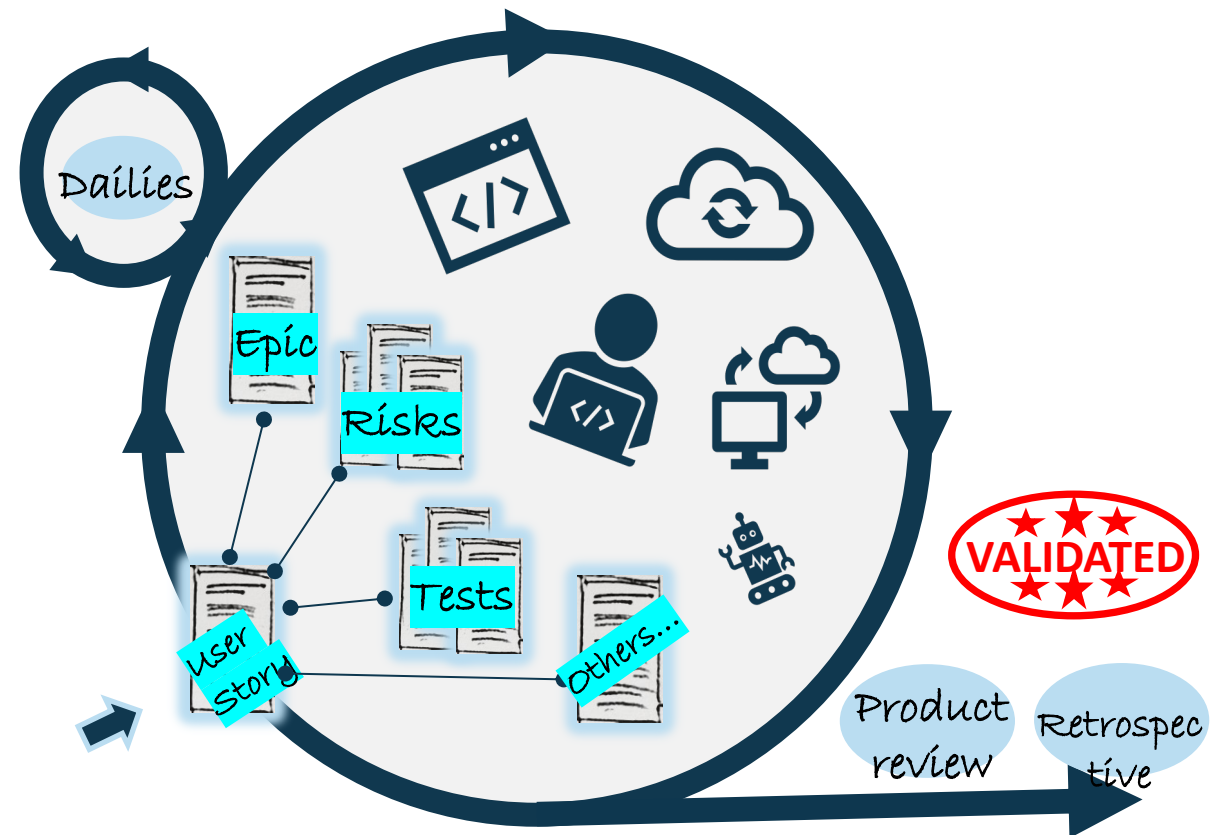
1. Clarity
2. Accountability
3. Organization
4. No word processing

1. We needed (& wanted) Hyperloop



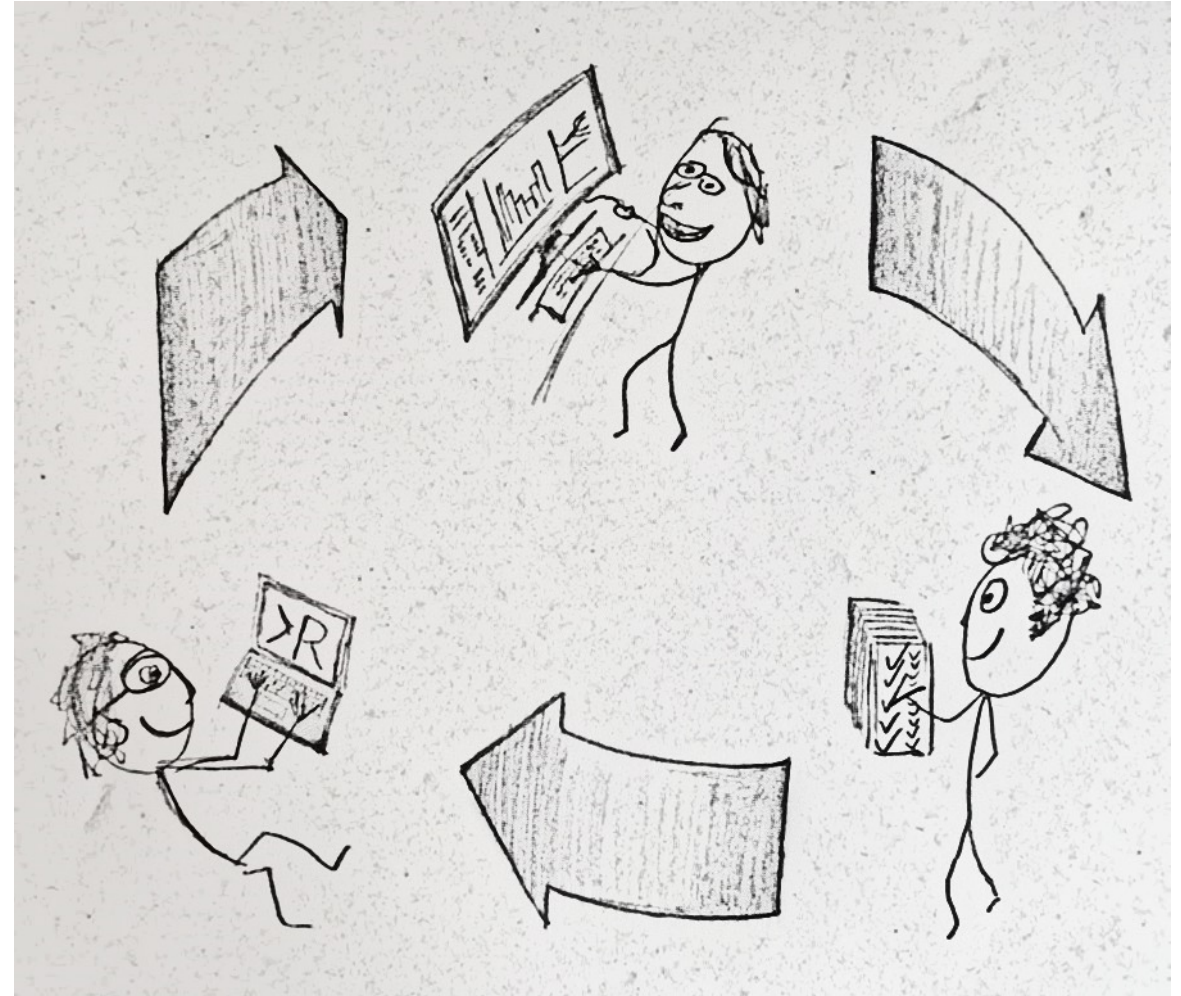
Summary

1. We needed (& wanted) **Hyperloop**
2. **Hyperloop** is



Summary

1. We needed (& wanted) **Hyperloop**
2. **Hyperloop** is
3. We know **Hyperloop** works





Acknowledgements



Oncology:

Stella Guo

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Sushma Penmetcha

Melanie Langer

PHUSE:

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Ritesh Dhimmar

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The Clinical Data
Science Conference

Questions?



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