

# Beyond Just Try Harder

Three effective strategies to tackle bugs

→ Andy Weir



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lets talk about the most popular non-strategy in software delivery...  
Just Try Harder

- heard it → said it

**Problem:** like when

- bugs **escape**, estimates **slip**, releases **break**
- CTO → incident → CTO things
- fire out → retro → just try harder

**Response:** so we end up with

- approvals → checklists → friction

**Real Problem:** here's the thing

- not strategy → broken system → failure easy

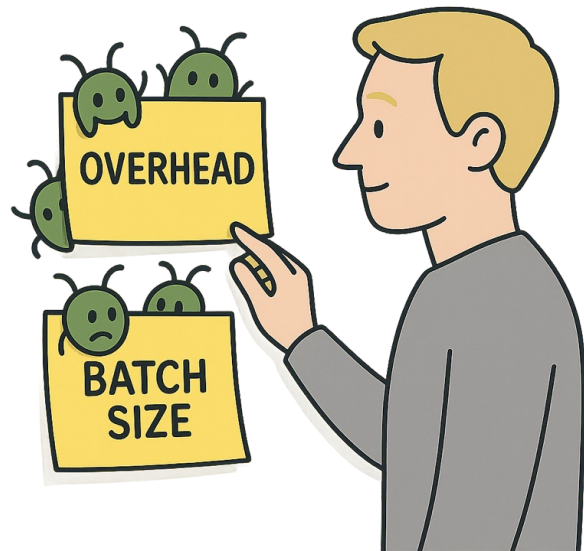
**Why Care:** and why do we even care about bugs?

- features
- **break** flow, **shake** trust, **kill** momentum

so let's stop blaming people, and start fixing the system

## What the Research Says

- From Boehm to DORA – creating systems where bugs can't hide



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- ... I wanted to take a step back, and look at why bugs slip through the net
- ... the research has said the same thing for decades

**1981:** ... Boehm found

- early catch → cheap fix

**today:** ... DORA found that

- **speed** → **stability** → hand in hand
- fast feedback → better outcomes
- Build **small**. Ship **often**. **Avoid** bugs. Fix **fast**.

- more approval → worse quality

**Chain:** ... here's how I like to think about it

- Overhead → Batch Size → Complexity → Hiding Place → Bugs

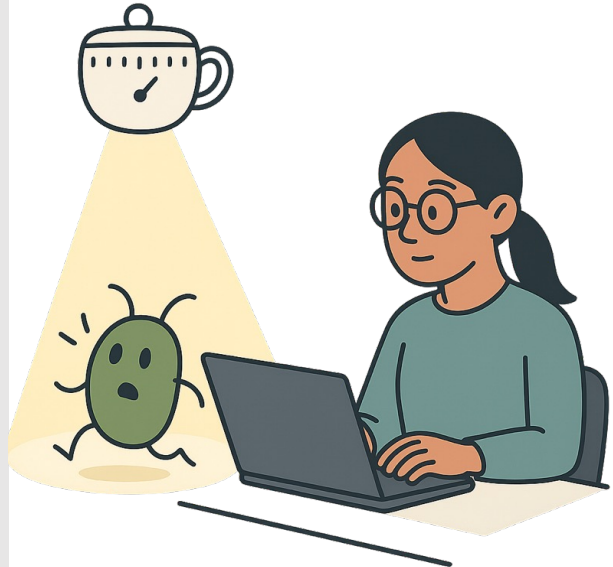
... so, that's the theory


... here's how it played out on our HealthTech platform


## Fast Feedback

- Get feedback in the time it takes to make a cup of tea

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 we had a test suite that took over 30 minutes to run

**Problem:**  and what did the team do?


- avoided running → batch changes → push everything → cross fingers

**Problem:**  and when the pipeline failed?

- quick and dirty → make it pass

**Impact:**  the result?

- bugs slipped through
- context lost → stress levels high


**Impact:**  we ended up debugging code from days ago

- ask what?

**Takeaway:**


- delayed feedback → bigger batches → complexity → risk

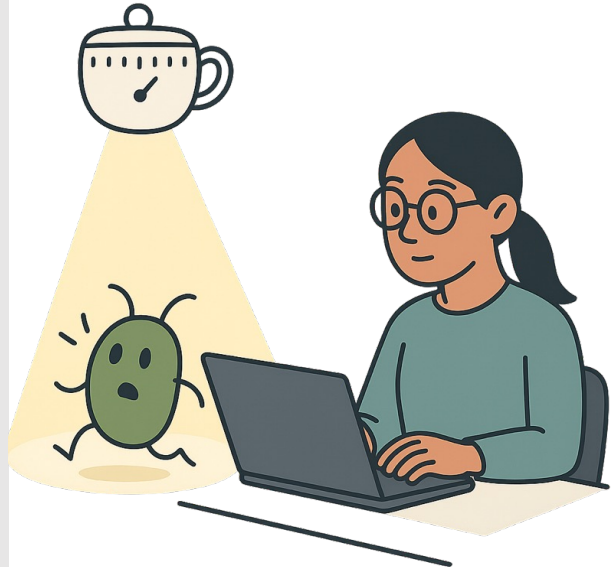
 so we needed a reset, we made a new rule


 “Get feedback in the time it takes to make a cup of tea”


## Fast Feedback

- Get feedback in the time it takes to make a cup of tea

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 we set out to make it real


**Solution:**  we set some targets

- 1 min local → 5 min pipeline
- **local runs:** analyse slow → prioritise → turn off
- **pipeline:** optimise → no framework → no database → hunt anything

**Result:**  and the result?


- hit targets
- **get** faster feedback → **push** smaller changes → **make** cleaner commits
- in flow → fix as created
- 20 hours → sort of → free build and test
- once → multiple

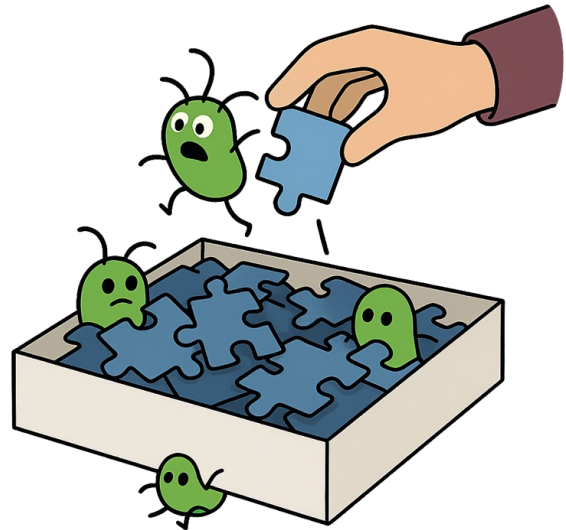
 but, even with fast feedback...

 our platform made every change feel risky

## Smaller, Safer Changes

- You can't inspect a fourth leg onto a three-legged table

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- ... fast feedback had helped
- ... but it didn't solve the fear of touching our legacy systems

### Problem:

- small change → big blast-radius
- one change → chaos in five

### Problem: ... and it was a full-time job

- triage & firefight
- bugs
- customers & staff

### Reaction: ... up until now

- catastrophe →
- checklist-item **appeared**
- process **introduced**


- ... it reminded me of something I heard at university

## Smaller, Safer Changes


- You can't inspect a fourth leg onto a three-legged table

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 you can't inspect a fourth leg onto a three-legged table

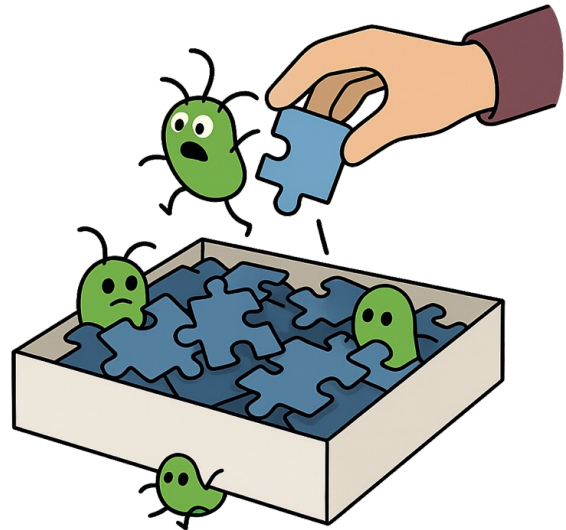
- inspectors
- factory
- white coats
- clipboards
- three legs
- should be four


 and there was nothing they could do


## Smaller, Safer Changes

- You can't inspect a fourth leg onto a three-legged table

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 so we took a different approach


**Solution:**  we followed the strangler fig pattern

- replace old → chunk by chunk
- rebuild → independent
- good tests → fast pipeline → from day one
  
- ready → switch → remove
- Expand. Migrate. Contract.

### Results:

- smaller scope → safer releases
- fewer approvals → faster flow
- release on demand

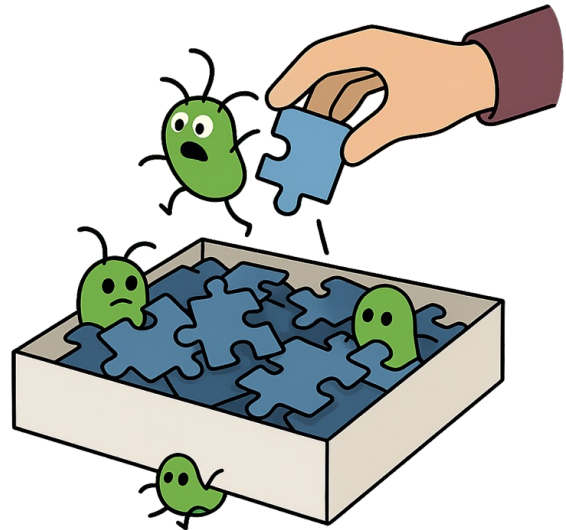
 that gave us confidence in the new

 but the legacy was still holding us back

## Smaller, Safer Changes

- You can't inspect a fourth leg onto a three-legged table

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- ... we were deploying the new services multiple times a day
- ... but the legacy? still took two weeks (if we were lucky)

**Problem:** ... every sprint finished with a scramble

- cherry-pick → extract → feature → last minute
- cross fingers → hope → ship

**Solution:** ... so we shifted our mindset

- towards trunk-based → always releasable
- automate pipeline → stop manual releases

**Result:** ... and the result?

- business → trust → firefighting → reduce
- duty engineer → triage → fixes & features → fires
- 2 weeks (maybe) → 2 days (if needed)

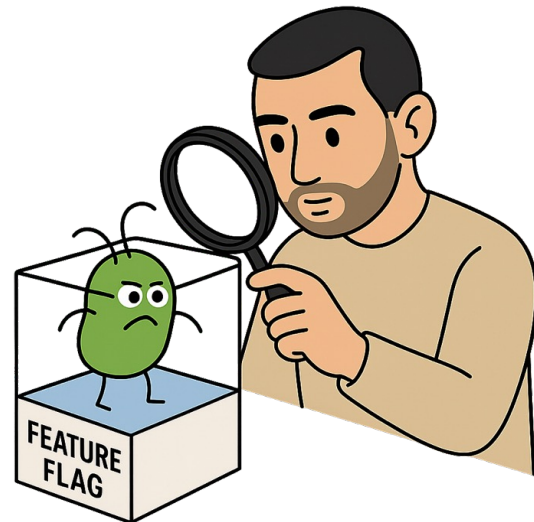
**Takeaway:**

- more approval → know → worse quality

- ... now we could ship often, the next step?
- ... ship without fear

## Controlled Delivery

- Find bugs before your customers do



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... shipping fast was great, but we still needed to ship safely

**Problem:** ... because no matter how good your tests are

- production → final test
- users → data → load
- edge cases

**Problem:** ... and in production

- bugs → stand out → hide below

**Problem:** ... we were about to launch a new service

- send → sensitive → health
- **lab** results → **heart** measurements → appointment **reminders**
- mistakes → embarrassing → regulatory risk → real-world harm


**Strategy:** ... so we took a three-pronged approach

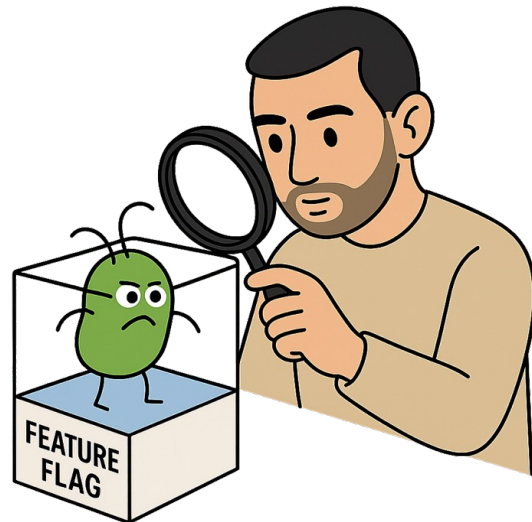
- monitoring → tells you something's **wrong**
- observability → tells you **why**
- feature flags → control **blast radius**

... we didn't just build alarms, we built safety nets

## Controlled Delivery

- Find bugs before your customers do

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... here's how we turned production  
... into a low-risk learning space

**Solution:** ... first, we dark-launched the service

- feature flags → old, parallel, new → same input/output → side by side
- hidden

**Solution:** ... next, we added monitoring and observability

- **tracking:** delivery rates → delays → discrepancies → old vs new

**Solution:** ... finally, we started with a safe group of customers

- staff → use product → gradual → confidence grow

**Result:** ... and the result?

- **delivered:** safely → confidently

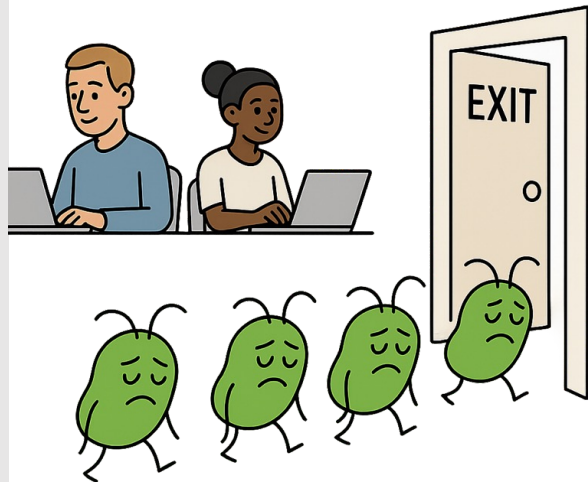
**Takeaway:** ... when you're working in a high-stakes context

- fast delivery → not enough → controlled delivery

... less **stress**, less **risk**, and nowhere for bugs to hide

## Go Beyond Just Try Harder

→ Build systems that make  
the right thing easy



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... we went from **firefighting** and **fear**  
... to **feedback** and **flow**

... not by pushing **people** harder  
... but by changing the **system** they work in

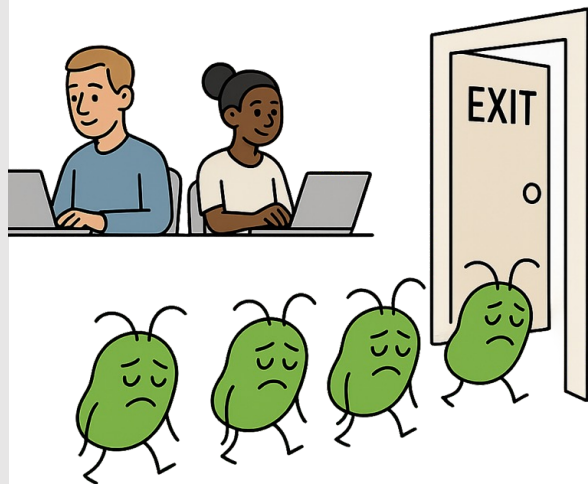
... because “Just Try Harder” **doesn’t work**  
... it **doesn’t fix** broken systems

... but the **data** shows us **what does work**  
Build **small**. Ship **often**.  
**Avoid** bugs. Fix **fast**.

... that’s why these three **strategies matter**  
Fast feedback — make **bugs cheaper** to catch  
Smaller, safer changes — make **changes easier** to ship  
Controlled delivery — make **production a safe place** to learn

## Go Beyond Just Try Harder

- Build systems that make the right thing easy



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… when your **system works**

- overhead → **drops**
- batch size → **shrinks**
- systems → **simpler**
- bugs → **nowhere to hide**

… and this isn't just a developer or tester thing

… Scrummasters, Product Owners, Engineering Managers

… the whole organisation **shapes** the **system**

… **better software** isn't about trying harder

… it's about **shaping systems** that **help you succeed**

… so let's build **better software**

… let's go beyond "Just Try Harder"


## Go Beyond Just Try Harder

- Explore the ideas, tools, and resources behind the talk

Illustrations generated with ChatGPT + DALL-E (OpenAI)

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 Thanks for listening 🙏