# Your engineers aren't afraid of AI

## They're afraid of becoming junior again

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"People will become dependent on this technology. They won't learn the fundamentals."

"Our job is about *thinking*, not just getting the correct answers. This technology short-circuits that."

**"We're producing a generation that won't know how to think for themselves."**

"They'll get results without understanding what they're doing."

"What happens when they don't have access to it? They'll be helpless."

1976


https://www.flickr.com/photos/51764518@N02/48750718883

**FROM ABOVE**

Move faster.

Productivity gains.

Competitors are ahead.

Board wants results.

**FROM BELOW**

Slow adoption. Too busy.

AI slop.

"But who reviews it?"

They're not afraid of AI.

They're afraid of becoming junior again.

**Technical debt**

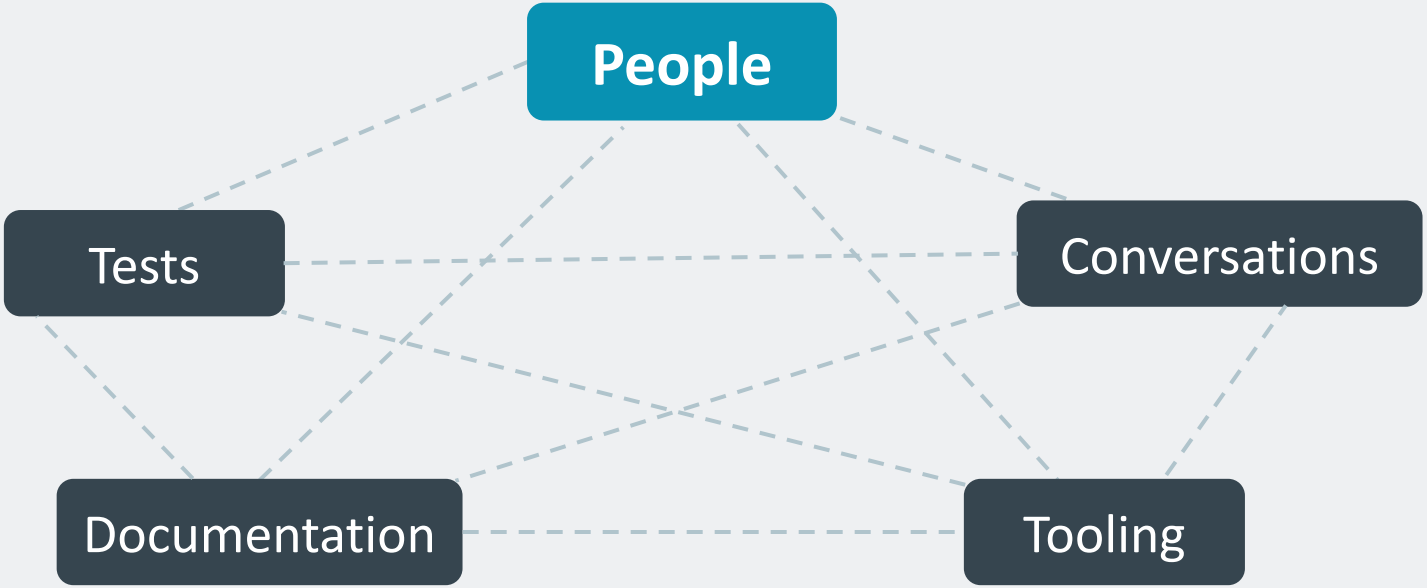
lives in the code.

**Cognitive debt**

lives in the team.

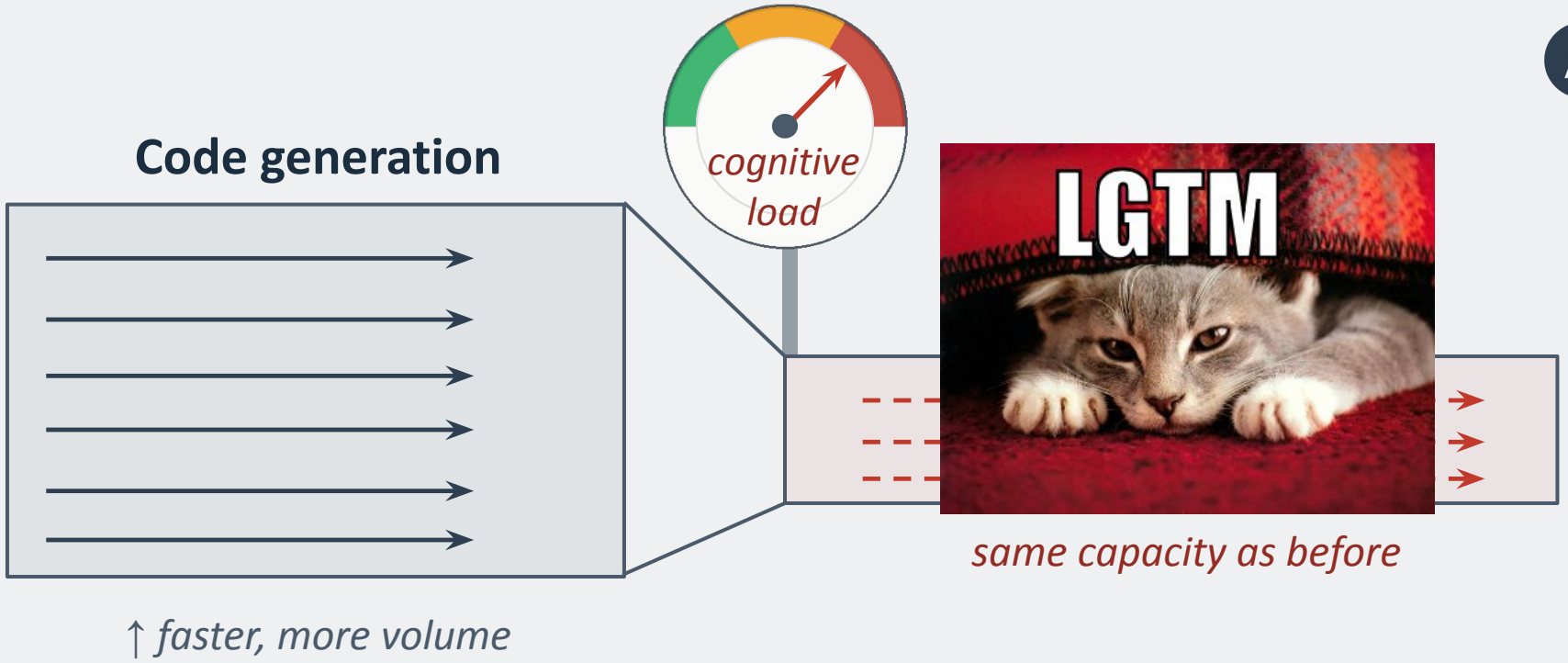
*Storey, University of Victoria, Feb 2026*

# *The distributed theory of the system*



*“The software may be ‘working’, but the theory of the system becomes harder to access and keep track of.”*

*Storey, 2026*




*The bottleneck doesn’t disappear. It moves.*

*“...engineers and managers together developed a definition of the situation that allowed them to carry on as if nothing was wrong when they continually faced evidence that something was wrong.”*

*Vaughan, The Challenger Launch Decision, 1996*

**BEFORE**

100 commits. Good readme.

Comprehensive tests.

**= Care and attention.**

**NOW**

100 commits. Good readme.

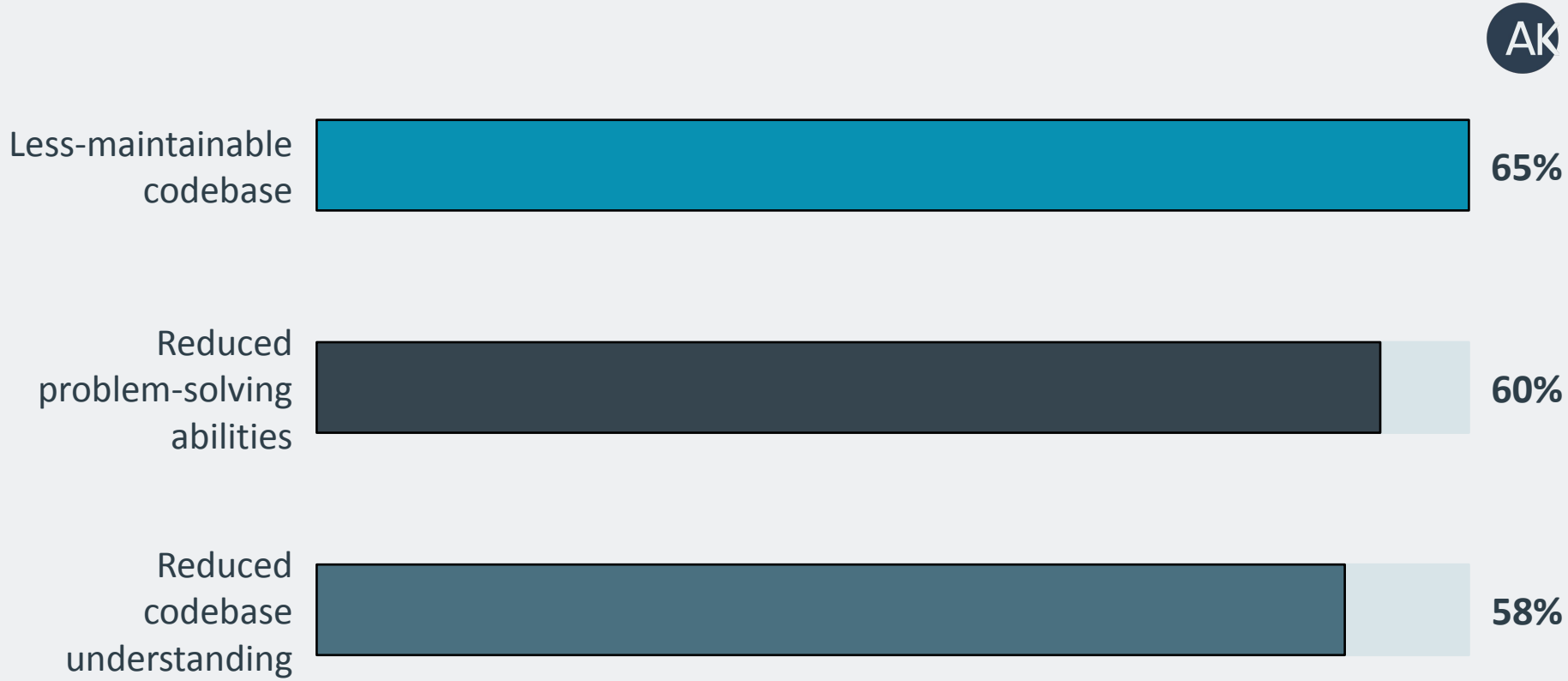
Comprehensive tests.

**= 30 minutes with Claude.**

*“Even for my own projects, I can’t tell the difference.”*

*Willison, 2026*

The whole lifecycle was calibrated for a production rate that no longer exists.




*Peate, L. "What concerns engineers about AI." Multitudes AI Impact Survey (industry + deep-dive), N=428; this chart N=400, 2025–26.*

**+27.2%**

PRs merged

**+19.6%**

out-of-hours commits

*Some of that productivity is borrowed from your engineers' evenings.*

*Peate & Katial, Multitudes, 2025*

**WITHOUT explicit quality expectation**

PR size increases

⟶ review quality degrades

⟶ cognitive debt

accumulates

**WITH explicit quality expectation**

Engineers steer AI to smaller

PRs

⟶ review quality hold

⟶ understanding follows

*Multitudes AI Impact Whitepaper, 2025–26*

*“[AI] can also encourage excessive reliance and the search for ready-made answers, and weaken personal creativity and judgment.”*

*Pope Leo XIV, Magnifica Humanitas §100 (2026)*

# What are we trying to be good at?

*“Mathematics is, and should always remain, a profoundly human endeavour.”*

*Leiden Declaration on AI and Mathematics, June 2026*

Hands on the keyboard

**Hands on the wheel**

Stop treating this like a tool rollout.

It is a fundamental change to what expertise means in your organisation.

## WHAT'S TRUE

- ★ Juniors gain more from AI
- ★ 72% satisfaction with AI tools
- ★ Gains in code generation: 21% more tasks done

## WHAT'S ALSO TRUE

- ★ Senior productivity drops 19%
- ★ Stability falls as adoption rises
- ★ Bugs per developer up 54%
- ★ 17% worse retention on new skills

*Tilburg 2025* *DORA 2026* *Faros AI 2026* *ZoomInfo 2025* *Anthropic, 2026*

01 | Name the fear properly

02 | Protect the learning conditions

03 | Make quality the floor

## 1. Name the fear properly

**Your most cautious engineers are your early warning system.**

# 2. Protect the learning conditions

Younger tech workers are

**38% more likely to hide AI use from their team**

*When experimentation stays hidden, the learning doesn't transfer.*

*Atlassian Teamwork Lab, 2026*

# 3. Make quality the floor


Quality standards aren't slowing you down. They're what lets AI speed you up.

*Peate, L. "What concerns engineers about AI." Multitudes AI Impact Survey (industry + deep-dive), N=428; this chart N=400, 2025–26.*

Some of your engineers **should** be a little scared.

The question is whether you're listening to what that fear is telling you.


The calculator didn’t make mathematicians obsolete.

**It changed what mathematical skill meant.**

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Slides & sources

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