11th Annual FinTech & Banking Awards 2026

The future of finance

When AI starts acting on our behalf



Dr Liming Zhu FTSE
Research Director, CSIRO

When both sides have agents

CUSTOMERS

An agent compares offers and negotiates within the customer’s brief.

FINANCIAL INSTITUTIONS

Agents analyse, recommend and act alongside finance professionals.



Who will catch the mistakes?

Can we trust an agent with a consequential decision?

In the loop | On the loop | Over the loop | **At the helm**

Limits of review

Even a diligent reviewer can lack the evidence or tools to spot an error.

Automation bias

Accept a poor recommendation because the agent is usually right.

Automation aversion

Reject a good recommendation after seeing the agent get another one wrong.

Meaningful review takes evidence and a real way to intervene.

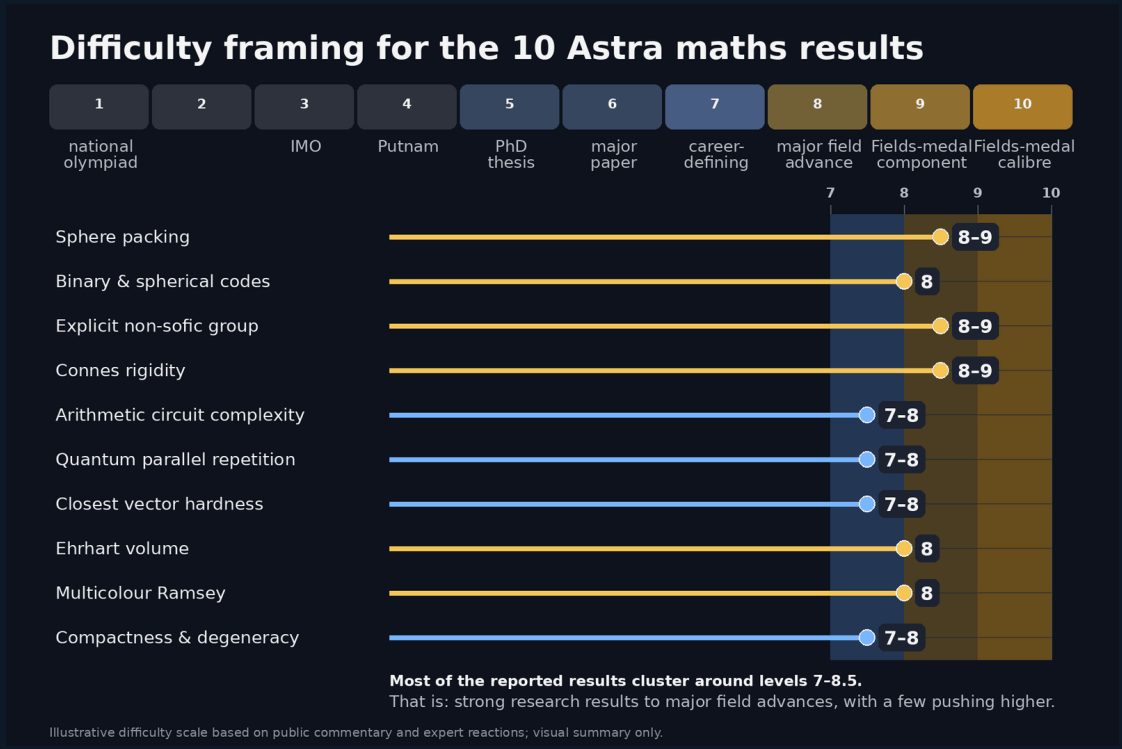
The bottleneck shifts to understanding

A GLIMPSE FROM MATHEMATICS

AI produces proofs.
A proof checker can check them.

Can we explain why the proof works?

Individuals learn. Fields and organisations build a shared grasp.



A signature alone can turn a person into a liability sponge.

CSIRO RESEARCH

Design AI to build human understanding

Understanding-First AI Engineering: Purposes, Reference Architecture, and Architectural Patterns for Human Understanding

Liming Zhu, Qinghua Lu and Ming Ding · November 2026

arXiv:2611.13022

How much understanding is enough?

Start each case with the system assurance that applies.

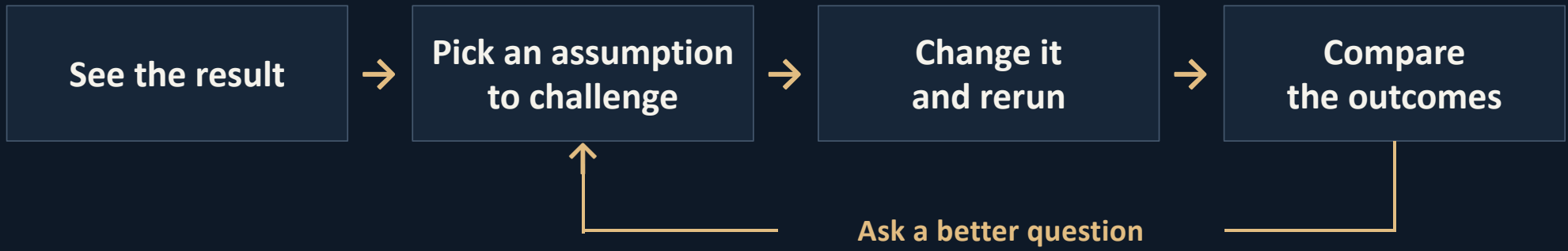
	UNDERSTAND THE SYSTEM	→	UNDERSTAND THIS CASE
Technical specialist	What worked under tested conditions?		Do those tests cover the inputs in this case?
Accountable manager	Where is the agent authorised to act?		Are we within its limits? Who can intervene?
Customer	What can the agent do on my behalf?		What would this offer mean for me?

“When you fully understand AI, it’s called boring automation.”

ITERATIVE INQUIRY

Make the recommendation challengeable

Show the assumptions and evidence that could change the outcome.



BORROWER · HOME LOAN HARDSHIP

“What will my repayments rise to?”

Compare the budget before and after interest-only repayments end.

LENDING PROFESSIONAL

“Which revised terms could work?”

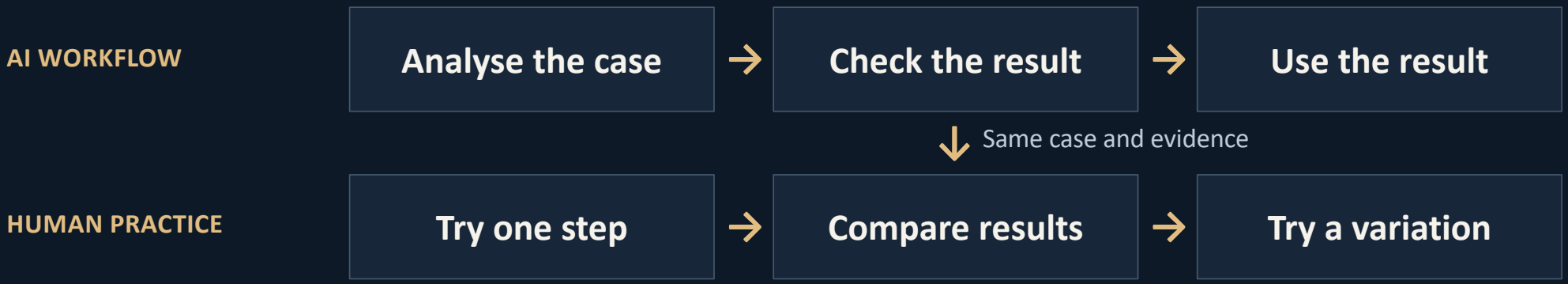
Test revised terms against income and other debt repayments.

Based on an AFCA home loan hardship case

LEARNING BY DOING

Let people practise alongside the agent

Give people one consequential step to try, compare and vary.



HOMEOWNER · 2022 FLOODS

Rebuild a timeline from photos and observations.

Compare it with the agent’s account.

CLAIMS ASSESSOR

Weigh the timeline against the expert reports.

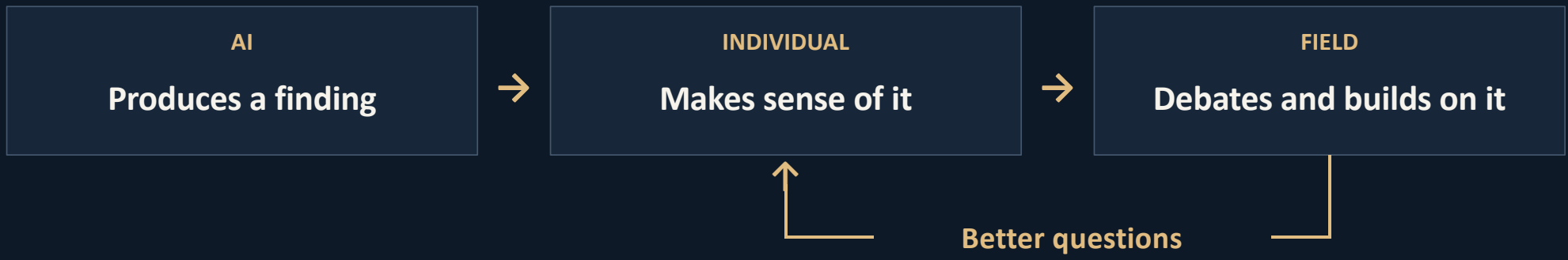
Explain which observation changes the assessment.

Based on an AFCA flood claim dispute

EPISTEMIC CURIOSITY

From an AI result to shared understanding

Even when the finding is sound, there’s more to learn.



RESERVE BANK OF AUSTRALIA · 2025

What can business conversations tell us about wages?

AI helped turn firms’ accounts into an earlier signal of wage growth.

Even when the agents get it right

What can people do with a deeper understanding?

Ask better questions

See what would change
the answer.

Make informed trade-offs

Discover what matters
when the options are real.

Govern together

Understand and own the
choices an institution makes.

Understand how things work

Follow a question past the
immediate decision.

The future of finance

Agents get things done for customers and institutions.

People build expertise by questioning results, learning together and trying parts of the work.

Understanding is the human job.

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