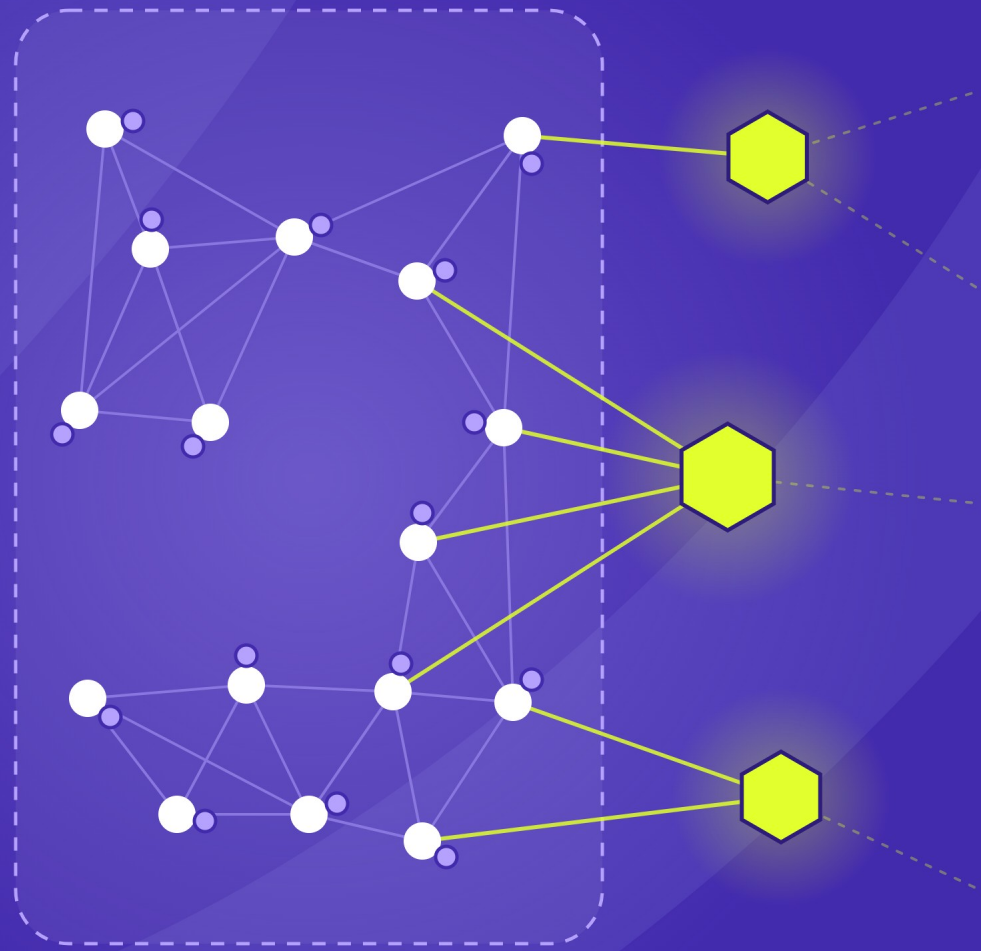
Beebolt

SEMICON EUROPA 2026 · MUNICH

Personal Agents, Collective Resilience

Building Supply Chain Agility with AI



Thelma Onyeka

Co-Founder and Co-CEO, Beebolt

Thelma Onyeka

Co-Founder & Co-CEO, Beebolt

From the mine to the machine.

She has worked at both ends of the chain this room runs on.

Mining
Regulatory compliance lawyer in critical minerals

8 years at Meta
Worked on early B2B use cases for GenAI in 2022

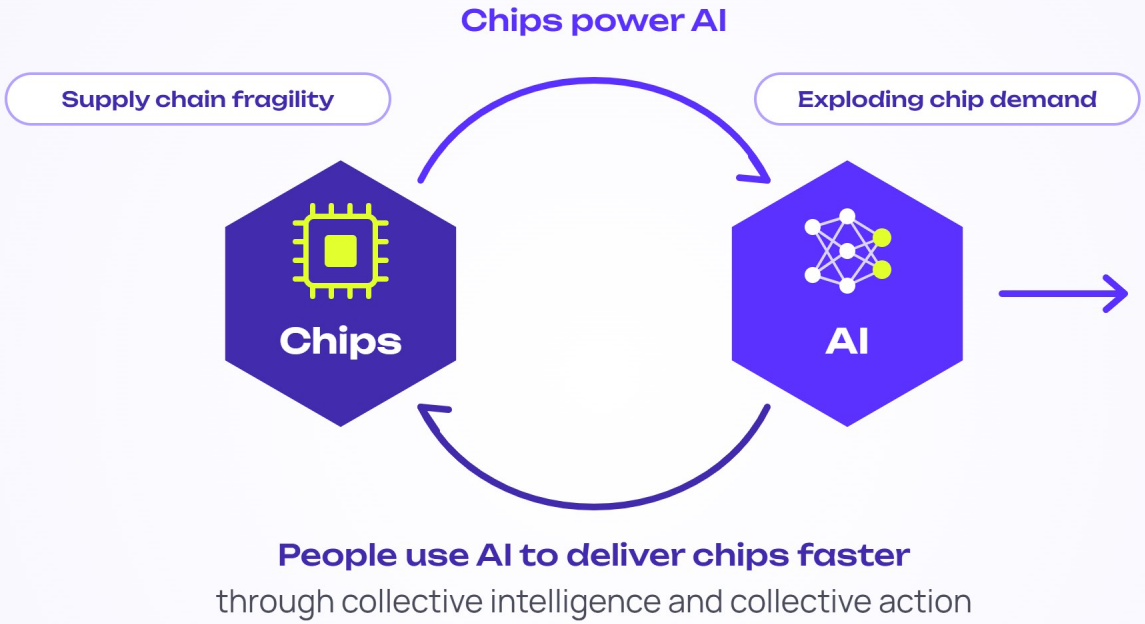
Beebolt
Co-founder, building Conductor for the industry



THE PARADOX OF AI

The technology disrupting our industry should be the technology enabling it.

AI needs more chips than the world can make. People using AI can deliver them faster.



DELIVER CHIPS SOONER. BETTER LIVES SOONER.

EDUCATION
A great education for every child

HEALTHCARE
Expert diagnosis for every patient

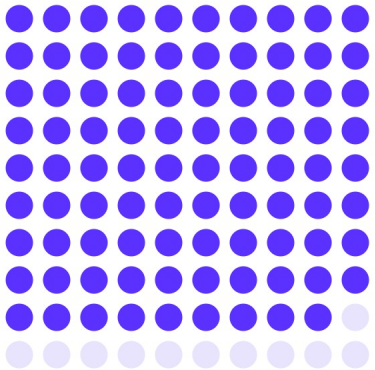
FOOD SECURITY
Enough food for every family

ENERGY
Clean power for every home

The missing piece is not the technology.
It is how we connect the people, data and intelligence behind it.

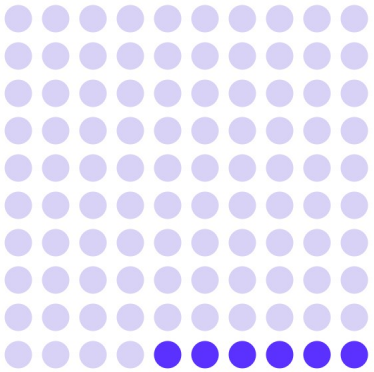
THE VALUE GAP

Deployed everywhere. Paying off almost nowhere.



89%

of companies use AI



94%

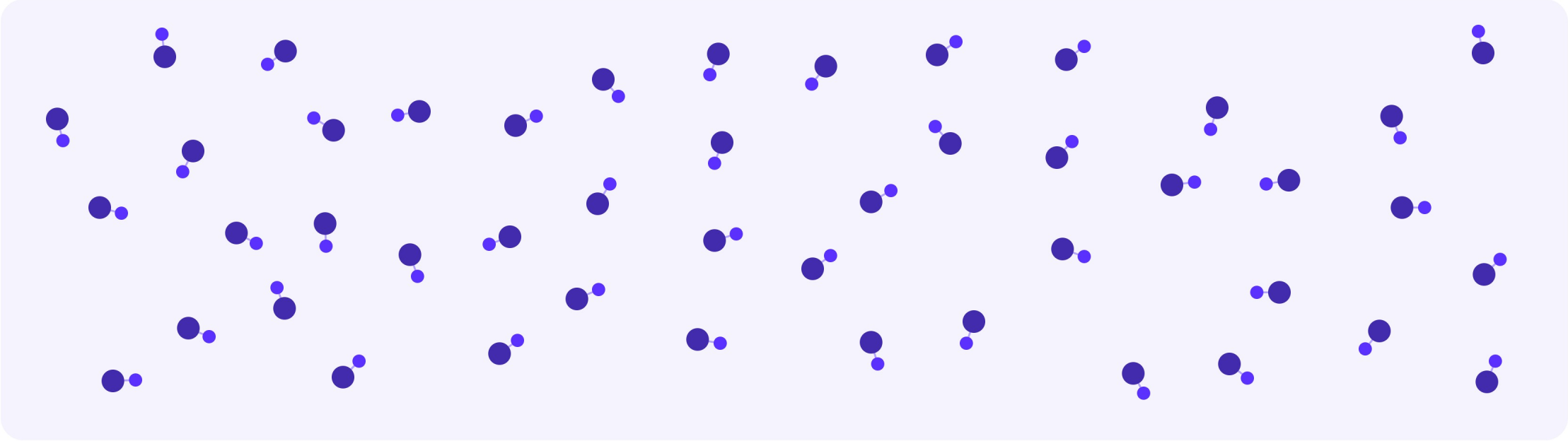
see no meaningful impact on earnings

IN OUR INDUSTRY

57% use AI in less than a fifth of their supply chain processes.

Sources: McKinsey, The state of AI, August 2026; SEMI Supply Chain Management Survey 2026, conducted with McKinsey & Company.

A thousand people with an AI assistant is not an AI-enabled organization.



● A person ● Their AI assistant

Productive in isolation. No more coordinated.

WHO WE ARE

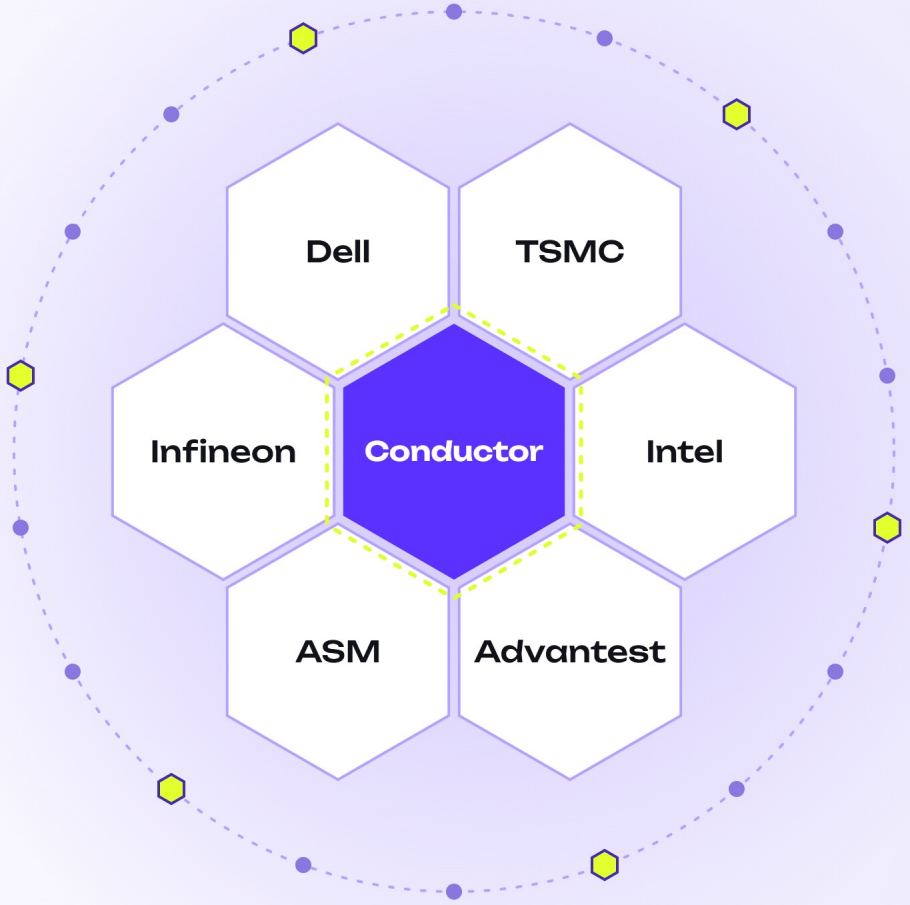
Industry leaders believed coordination could be better. With AI, we can be more ambitious than ever.

CONDUCTOR

semi × Beebolt

SEMI brings the industry's trust. × **Beebolt brings the technology.**

Built with SEMI members, led by its Industry Advisory Council.



INDUSTRY ADVISORY COUNCIL

FORESIGHT IN ACTION

The memory shortage, replayed through Conductor

Mapping the difference between being an anticipator and being stranded.

Anticipators
Moved on the first signals.

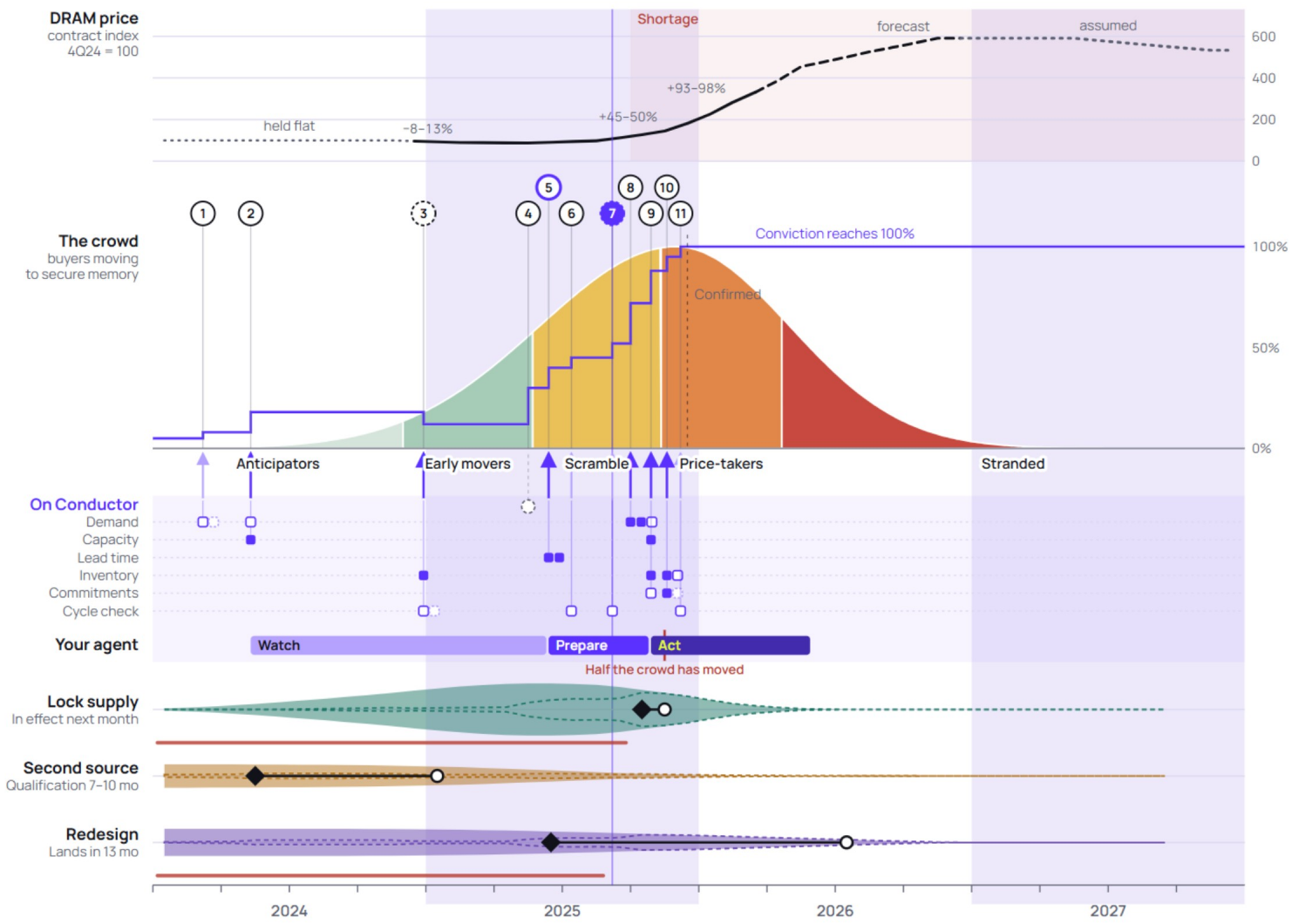
Early movers

Scramble

Price-takers

Stranded
Moved after the windows closed.

Where were you on this chart?



FORESIGHT IN ACTION

The signals were in Conductor before the news



Jun 2025

Lead times stretch in the SEMI survey on Conductor, **six months before the shortage is confirmed.**

~$100B

incremental cost of the memory shortage

4.8×

value of acting early vs after confirmation*

*Illustrative: Beebolt Memory Shortage Replay. Tier 1 buyer, $120M memory spend a year, public price data. Not a forecast or advice.

BUILDING BLOCKS

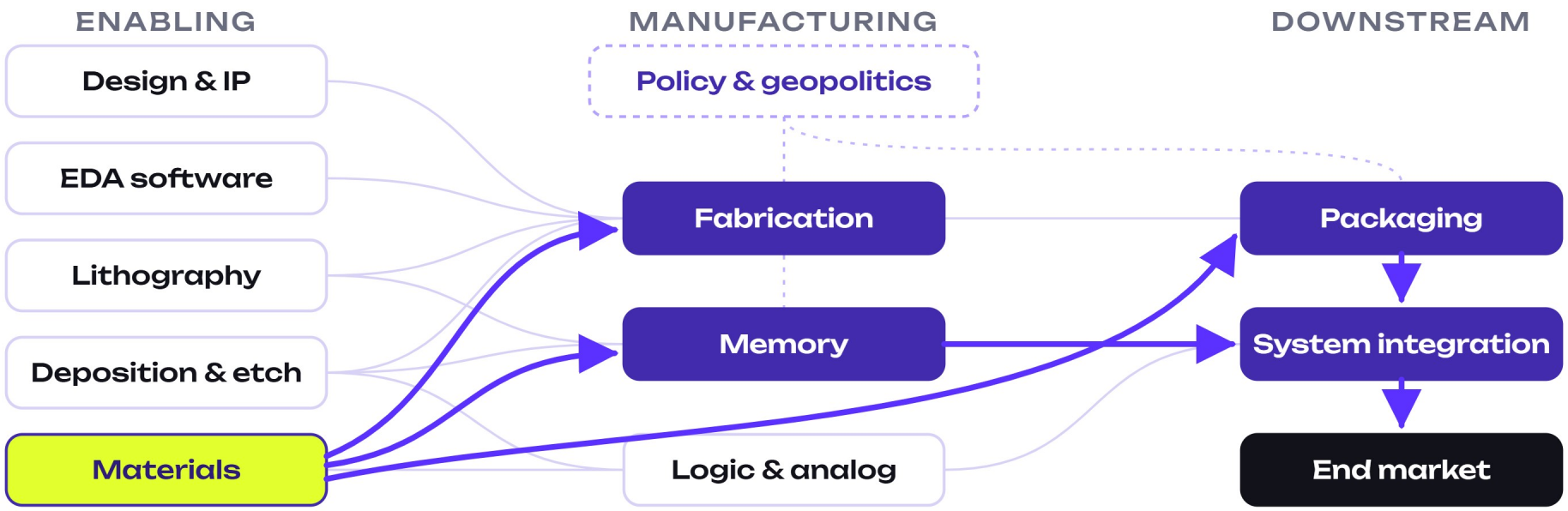
Four sources of intelligence. One connected system.



* Internal data integration is not necessary for successful use of agents.

BEHIND CONDUCTOR · THE VALUE CHAIN MAP

One map of the chain. So a shock can be traced.



ORIGIN
Materials
Substrate lead times stretch

SPREADS
Fabrication
Wafer output under pressure

SPREADS
Memory
HBM inputs constrained

BINDS
Packaging
Advanced packaging chokepoint

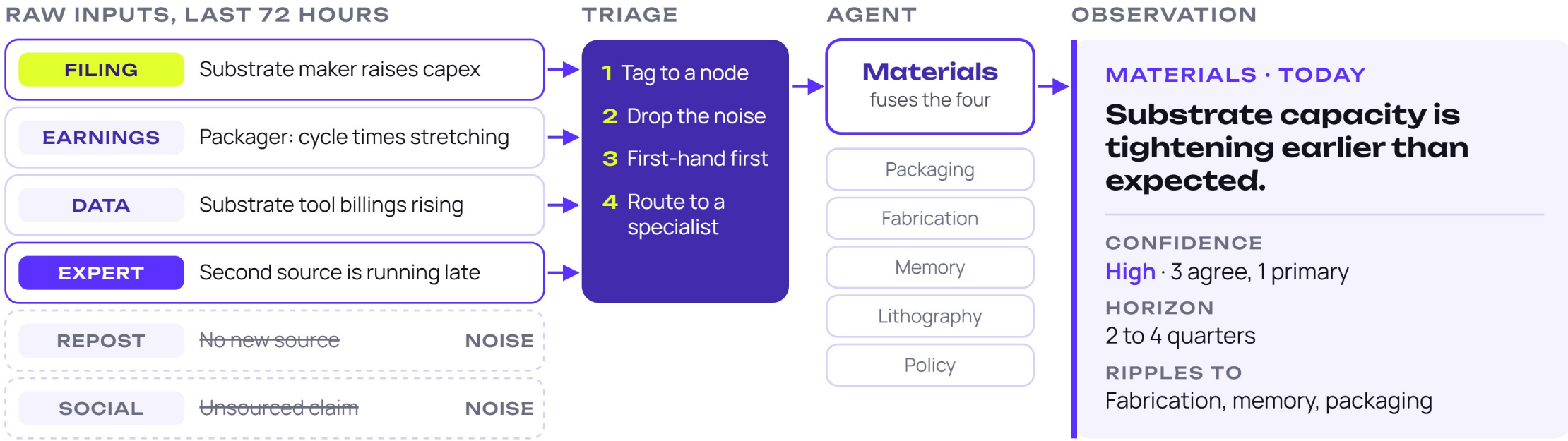
HITS
Systems
Server makers can't build

COSTS
End market
AI capacity slips

12 nodes · 25 links modelled · 5 extreme chokepoints · policy as an overlay · illustrative cascade

BEHIND CONDUCTOR · HOW A SIGNAL IS BORN

Many inputs in. One trusted observation out.



Industry in the loop®

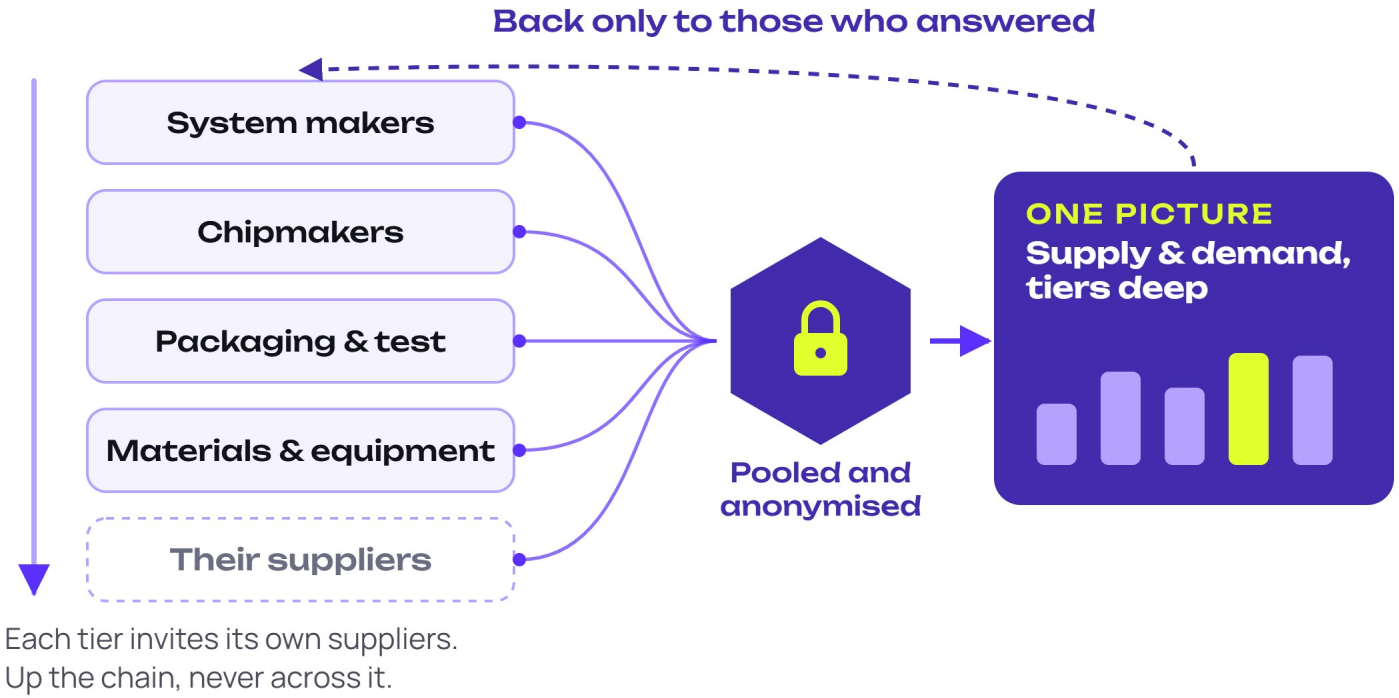
The Data Council, practitioners, experts and fellows validate every layer.

✓ The map ✓ The triage ✓ The observation

Illustrative example.

BEHIND CONDUCTOR · THE QUARTERLY PULSE SURVEY

Everyone gives a little. Everyone sees the whole.



Each tier invites its own suppliers.
Up the chain, never across it.

Give to get
Answer, and you see the results.

Never one company's data
Answers are pooled and anonymised before anyone sees them.

Released together
Results unlock once enough of the chain has answered.

Governed by the industry
Run with SEMI. The Data Council sets the questions.

EVERY QUARTER **4,000** member companies **120,000** people **3 min** to answer

THE TSUMIKI REPORT

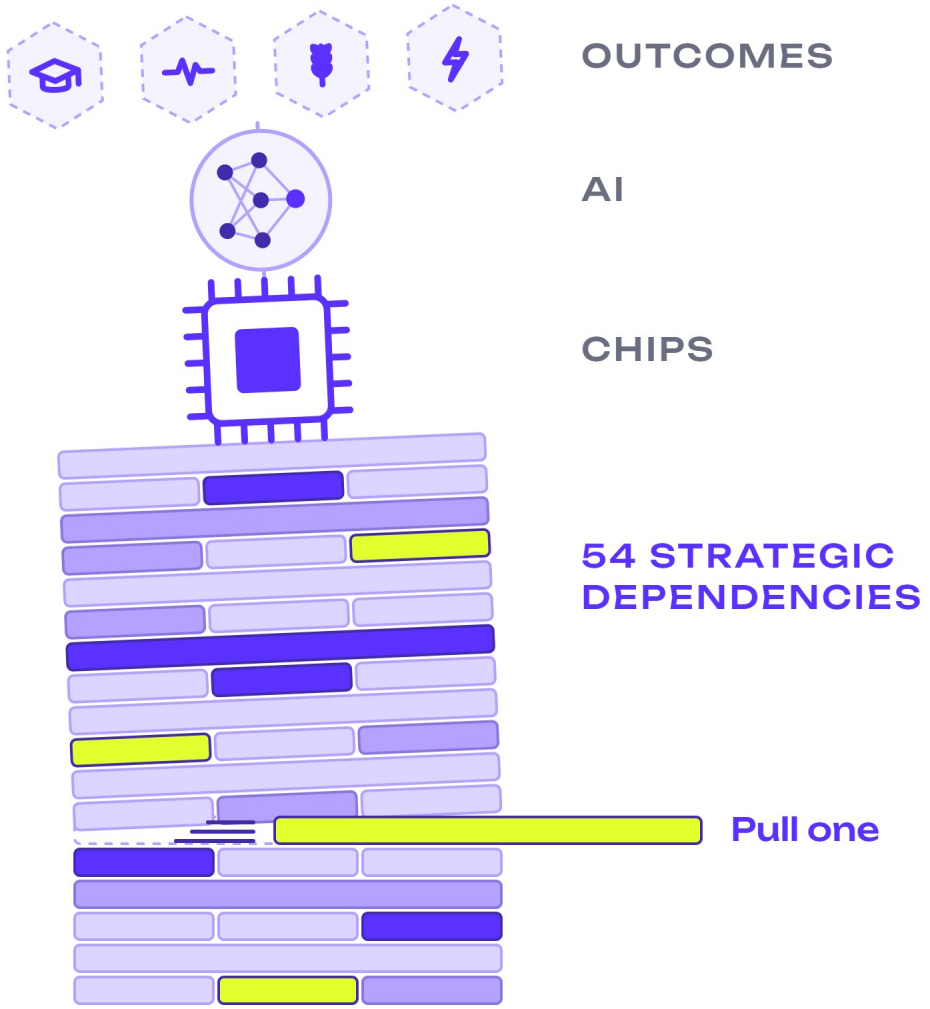
We mapped the chokepoints, so you can plan around them.

54 strategic dependencies, scored and ranked.

Critical	**Plan around it**
High	Watch and playbook
Medium	Monitor
Low	Already mitigated

THE TSUMIKI TEST

If this block disappeared tomorrow, would we know what to do?



YOUR PERSONAL AGENT ON CONDUCTOR

Meet Chip.



You: “Is our gallium supply at risk?”

Answer Two of your three suppliers are affected.

Next step “I’ve drafted a note to Felix in procurement. Send it?”

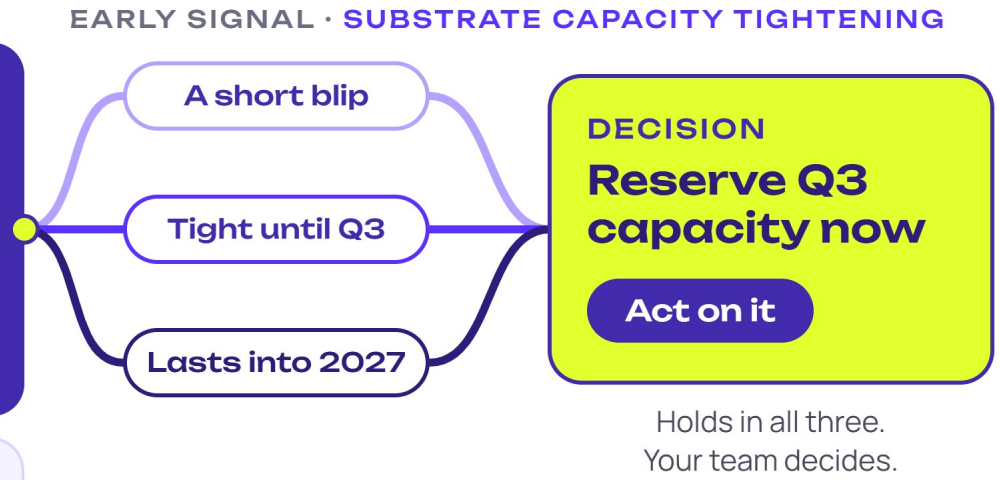
Send it

CHIP DRAWS ON **Signals · Demand · Supply · Logistics · Research**

WHERE AGENTS ADD THE MOST VALUE

External data. Human judgment.

	Internal data	External data
Judgment-led	**Internal analysis** Planning and analytics on your own data.	**AGENTS HELP MOST** **Personal intelligence agents** Market and competitive intelligence, scenarios and early signals. People decide.
Rule-based	**Rule-based automation** Quality standards and system workflows.	**Data feeds and reporting** Standard market data and recurring reports.

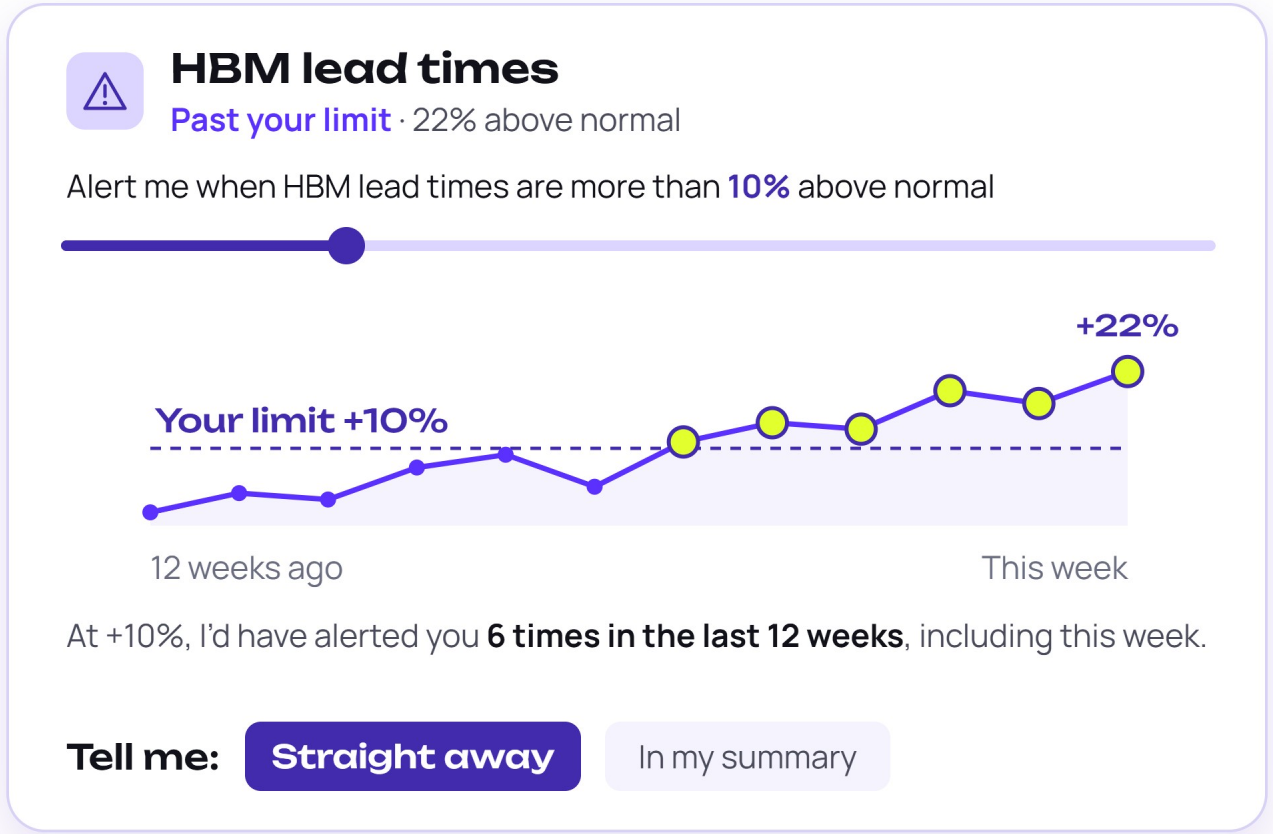


Holds in all three.
Your team decides.

The real potential is where decisions are less rule-bound and draw on external data.

LET AI DO THE READING

Anticipate earlier. Chip watches for what you set.



Set your own trigger point

Pick the signal and threshold for your role.

Test it on history

See how often it would have fired before you save it.

Choose how you hear

Straight away when it can't wait, or in your regular summary.

Your signals and thresholds stay confidential to you.

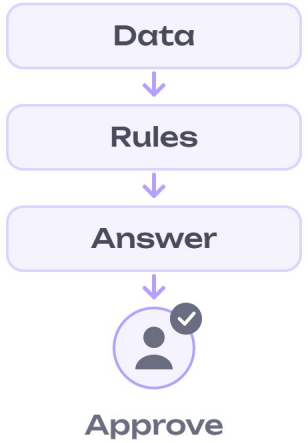
Illustrative example from the Chip alert set-up.

HUMAN IN THE LOOP, REDEFINED

Not a human at the end. Judgment at the centre.

HUMAN IN THE LOOP

Rules-based AI



A person signs off at the end.

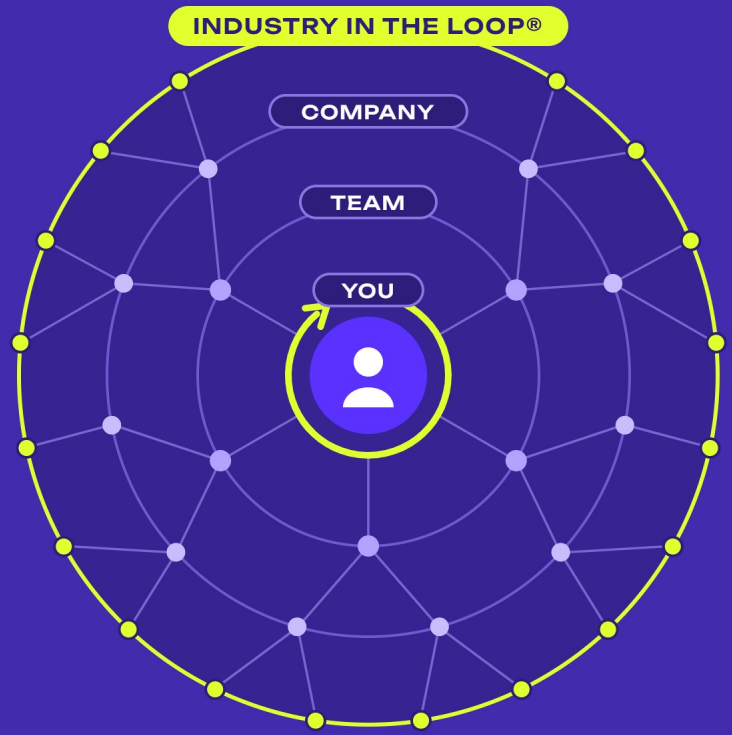
VISION

Judgment-led AI

Your judgment shapes every step:

- **The question you ask**
- **The signals you trust**
- **The call you make**

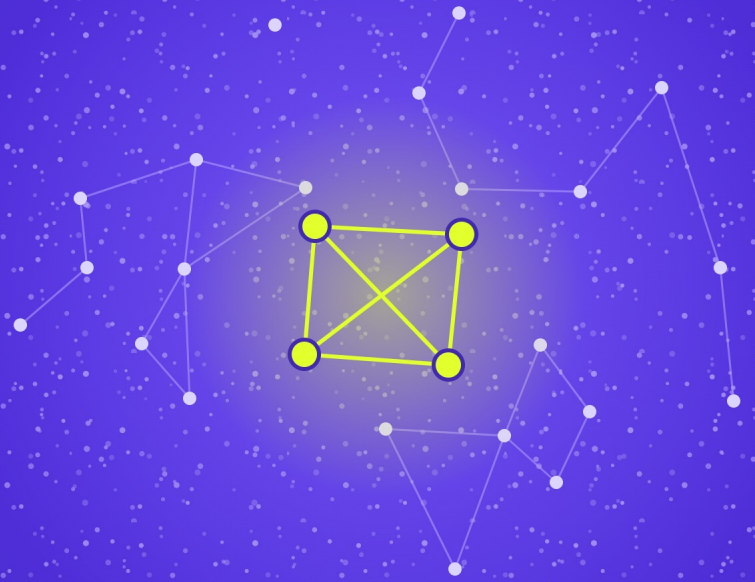
Then it scales,
to the whole industry.



THE REAL UNLOCK

The intelligence is already inside your people.

What they know. What they've heard. What they've seen before.



ONE COMPANY. 10,000 PEOPLE.

Personal agents unlock it.
Connected, it compounds.

PAIRS
50 million

GROUPS OF THREE
167 billion

GROUPS OF FOUR
416 trillion

WALK AWAY WITH THIS

Three questions to take home.

LEVEL 1 · YOU

Does your AI strategy give every employee personal intelligence support? Or is it just a chatbot?

LEVEL 2 · YOUR COMPANY

Has it helped your people, teams and company work better together?

LEVEL 3 · YOUR PARTNERS

Has it changed how you work with suppliers, vendors and partners?

Yes to all three? You're doing incredibly well.

BACK TO WHERE WE STARTED

A thousand people with an AI assistant is not an AI organization.

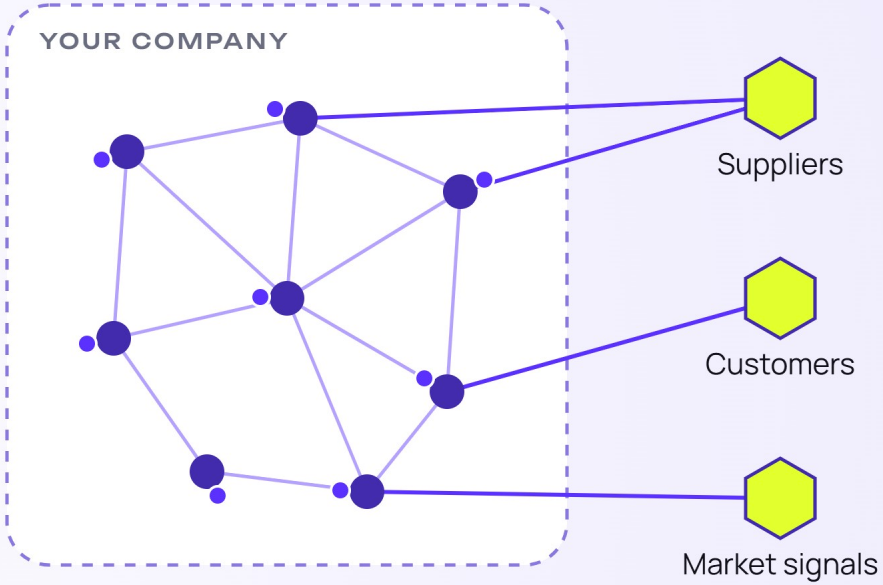
An AI organization works in the wild.

Judgment-led

Many hypotheses. Changing your mind.
New information in real time.

Beyond the data you control

Not just what sits in your SAP. The signals outside your walls.



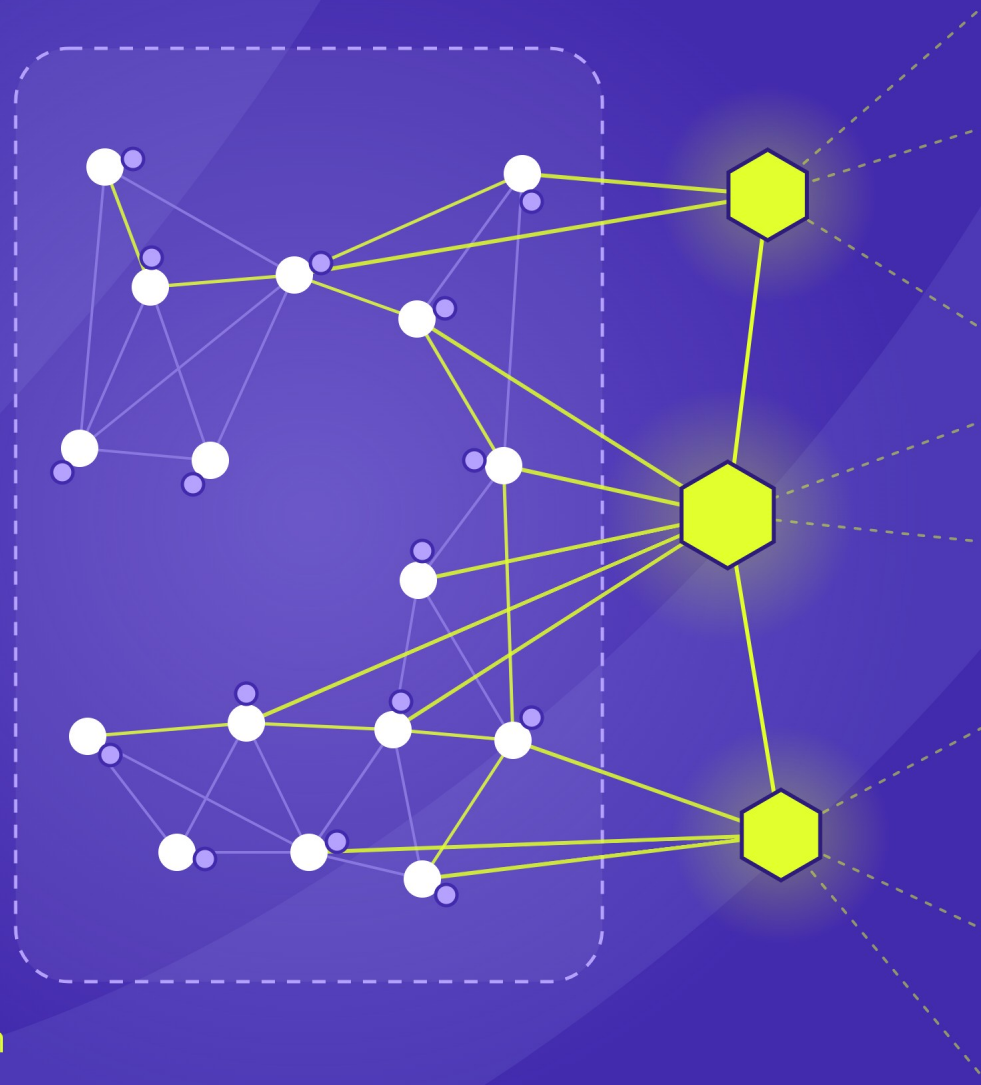
Not AI to automate semiconductors. AI alongside the people who make them.

Beebolt

Help the world arrive sooner.

Complete the Pulse survey.

Three minutes. Answer, and you see the results.



Thelma Onyeka

beebolt.com