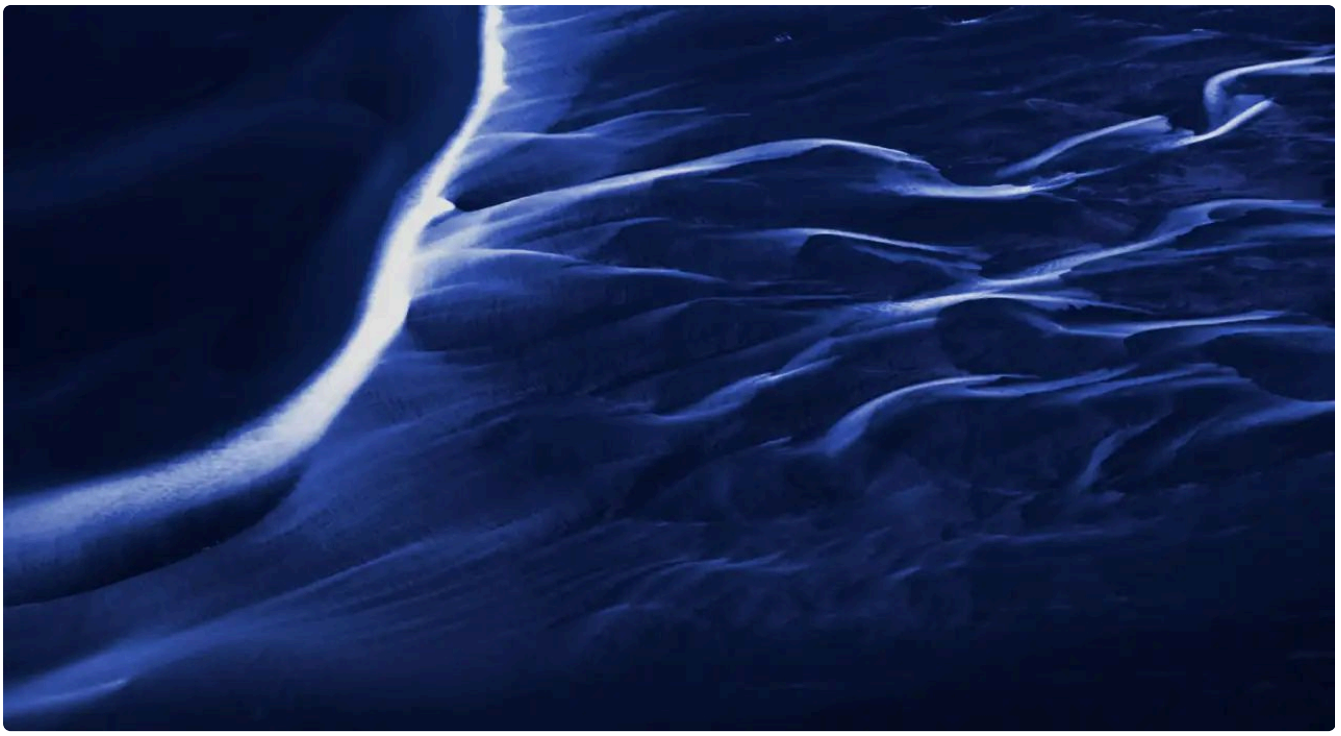


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The AI delta

Why AI is moving faster than companies can use it, and where to start



Philipp Pöschke
Founder, Paice

AT A GLANCE

- The AI delta is the gap between the pace at which AI improves and the pace at which companies put it to use; it widens by itself with every new generation of models.
- It closes when companies catch up in five areas, from exploring to enabling; which area holds things back most differs from company to company.
- The starting point is an honest assessment; first comes the area that blocks all the others.

AI's capabilities are growing faster than companies are putting them to use. We call this gap the AI delta. It isn't a snapshot. With every new generation of models it widens, as long as the company doesn't catch up.

In this article we explain why the AI delta exists, the five areas where companies need to act and how to recognise where action is needed. We describe typical causes, what helps in each case and where to start. At the end there's a checklist of ten questions for a first self-assessment.

Two curves moving apart

How fast capabilities are growing can be measured. The research organisation METR tracks how long the tasks are that AI models complete with a 50 per cent success rate, measured by the time humans need for them. Since 2019 that span has doubled roughly every seven months.

Adoption is rising too, but from a different base. In Germany, around 12 per cent of companies with at least ten employees used AI in 2023, 20 per cent in 2024 and 26 per cent in 2025. Across the EU the share was 20 per cent in 2025. These figures tell you who uses AI. They don't tell you what comes of it.

Studies on that exist, and the picture is mixed. In the customer service operation of a software company with more than 5,000 agents, an AI assistant raised the number of issues resolved per hour by 14 per cent on average, and by 34 per cent for novices. In an experiment with 758 consultants at a consulting firm, participants using GPT-4 on suitable tasks completed 12.2 per cent more tasks, 25.1 per cent faster and at more than 40 per cent higher quality. On a task outside what the model handled well, however, they were 19 percentage points less likely to get it right than the group without AI. And experienced open-source developers took 19 per cent longer with AI tools, even though afterwards they believed they had been 20 per cent faster.

The studies don't contradict each other. They show that the value depends on the task, the people and the setting. At the level of the whole company, something else comes in. The economists Brynjolfsson, Rock and Syverson describe a J-curve for general-purpose technologies such as AI. The value only shows once companies have invested in complementary, hard-to-measure things, above all new processes and new skills. Until then, what you mostly see is cost.

Why the delta exists

A technology that fits almost any process only creates value when several things come together. Someone has to know what it can do for the business. Someone has to decide where money and time go. The

solution has to work with real data and systems, become part of processes and be mastered by people who use it and take responsibility for it. If any one of these is missing, the value gets stuck, however good the model.

That explains why the reasons companies give are so varied. Among German companies that considered AI in 2025 but didn't introduce it, 72 per cent cited a lack of knowledge, 62 per cent unclear legal consequences and 60 per cent data protection concerns. 45 per cent saw problems with existing systems, 44 per cent with the availability or quality of data. These reasons come from very different corners of the business.

> The AI delta only closes when five things come together. Where things stall most differs from company to company.

FIGURE 1

Where companies act to close the AI delta

01 Explore

Do we know what AI can do for us?

LABS

02 Decide

Do we know which initiatives are worth it, and in what order?

STRATEGY & CONSULTING

03 Build

Does our solution work with real data and real systems?

ENGINEERING

04 Embed

Is the solution used day to day, and who runs it?

TRANSFORMATION

05 Enable

Can our people use AI safely, steer it and take responsibility for it?

ACADEMY

Source: Paice

The numbering follows the path of an initiative. Paice has its own capability for each area, as the figure shows.

Where companies need to act

1. Explore

Know reliably what AI can do for the business today.

Signs that action is needed. The picture of what AI can do comes from demos, vendor claims or a test from last year. Business units and IT rate the same application very differently. Asked which tasks in the company could be handled reliably today, people have opinions but no evidence.

Typical causes. Knowledge about AI goes out of date within months. Add to that what researchers call the "jagged frontier": two tasks that look equally hard often sit on different sides of what a model does well. Tests on other people's examples therefore say little about your own tasks.

What helps. Test on your own tasks, with criteria set in advance and results written down. A regular review of models and tools, assessed against your own processes, keeps the picture current. Short prototypes are the right tool for individual open questions.

2. Decide

Settle what comes first, what it delivers and which rules apply.

Signs that action is needed. The list of possible use cases keeps growing, and nobody has decided what comes first and what doesn't come at all. Pilots are running in several units, and nobody rules on whether they continue. Business cases promise savings without disclosing their assumptions. It's also unclear who approves an AI system and what role the company has under the EU AI Act.

Typical causes. Budgets are allocated by unit, while AI initiatives cut across unit boundaries. Without shared criteria, the most enthusiastic pitch wins. And legal uncertainty leaves decisions on the table.

What helps. A portfolio in which every initiative is scored against the same criteria: value, feasibility and risk. For the two or three most important initiatives, business cases with disclosed assumptions are worth the effort; for the rest, a conscious decision not to pursue them for now. On top of that comes an operating model that sets out who is responsible for decisions, development and operation, with rules that fit your existing controls.

3. Build

Build solutions that work with real data, systems and exceptions.

Signs that action is needed. The demo convinces; testing on real cases turns up error after error. The connection to ERP or CRM is missing or planned "for later". Nobody can say how often the solution gets it right, what mistakes it makes or what a single case costs. As soon as the solution is meant to write to systems itself, security and permissions are unresolved.

Typical causes. Many prototypes are built to show that something can work in principle. The hard parts, such as exceptions, data quality and interfaces, only come up during delivery. It's no coincidence that hesitant companies name existing systems and data as obstacles.

What helps. Work with real data and everyday exceptions early on. Decide before building what quality counts as good enough, then measure it continuously. An operating concept with permissions, logs and monitoring is part of the solution, and so is the cost per case.

4. Embed

Make solutions part of processes, roles, metrics and operations.

Signs that action is needed. The solution runs technically and people work around it anyway. One step in the process has become faster, yet the end-to-end lead time is unchanged. Once the project ends, nobody feels responsible for running it. Nobody has measured the benefit in the business.

Typical causes. AI is dropped into an existing process without changing the process. The accelerated step then waits for the same approval meeting as before. Responsibilities for the period after the project aren't settled, and targets are measured by unit while the solution works across units. This is the J-curve on a small scale. The complementary work on processes and roles is missing, so the value doesn't arrive.

What helps. Redesign the process around the new possibilities. Before launch, name a person in the business who answers for the benefit and a unit that runs the solution. Pick a metric the business understands, such as lead time or error rate, and measure its baseline. Bring employees and the works council in early.

5. Enable

Enable people to use, steer and take responsibility for AI with confidence.

Signs that action is needed. Usage depends on a few enthusiasts. Results are either accepted unchecked or distrusted on principle and checked twice. Managers decide on initiatives whose benefits and risks they only know second-hand. Staff don't know what they're allowed to do with which data.

Typical causes. Training is treated as a one-off obligation and uses textbook examples. Yet judgement is hard, as METR's developer study shows, in which participants thought they were faster when they were in fact slower. Since the Omnibus amendment in July 2026, the AI Act requires providers and deployers to take measures to support AI literacy. A mandatory course on its own is not enough.

What helps. Learning on your own tasks, separated by role. Senior leadership needs different knowledge from a business unit or a development team. The central question is when you can trust a result and when you need to check it. Champions in the business units keep the knowledge current in daily work.

Where to start

Companies rarely start with the first area. The rule is simple. Start with the area that blocks most of the others. A company with twenty pilots needs decisions first. A company that doesn't yet know where AI can help needs insight first.

FIGURE 2

Where to start: five typical situations

01

No clear picture yet

Individuals use AI tools, but there's no shared understanding. Start with exploring, testing AI on your most important processes.

02

Lots of pilots, no direction

Several units are experimenting and nobody decides what continues. Start with deciding, with a portfolio scored against shared criteria.

03

The prototype convinces, the roll-out stalls

Problems surface with real data and real systems. Start with building, with measured quality and an operating concept.

04

The solution is live, the impact is missing

Technically everything runs, but little changes day to day. Start with embedding, with a redesigned process, named ownership and a metric.

05

Tools for everyone, used by a few

Licences have been rolled out, but only a small group uses them. Start with enabling, learning on tasks from people's own work.

Illustration: Paice. Typical situations, not client projects.

Two things apply wherever you start. Building capability always runs alongside, tied to the area you're working on at the time. And every step forward makes the next bottleneck visible. Once a solution is running stably, it soon becomes clear whether the process and ownership hold up.

The common view and ours

The usual explanation for missing value names one main cause, depending on the angle: data, technology or culture. Each of them is true in some companies. As a general rule it's misleading, because it prescribes an order of work that doesn't suit many companies.

FIGURE 3

The common view and ours

COMMON VIEW	OUR VIEW
AI initiatives fail because of one main cause, such as data, technology or culture.	**Value only appears when five things come together. Where things stall most differs from company to company.**
Strategy first, then delivery, training at the end.	**First comes the area that blocks the others. Building capability runs alongside from day one.**
Progress shows in the number of pilots and users.	**Progress shows in what has changed in the process and what it delivers for the business.**
The next, better model will narrow the gap.	**Every new model widens the gap at first. It only closes once the company catches up.**

Illustration: Paice

Self-assessment in ten questions

Only answer yes if you can back it up. Each pair of questions belongs to one area, in order from exploring to enabling.

01 Can we say what AI reliably does today in our five most important processes, and have we tested that on our own data?

02 Does someone regularly check what new models and tools change for our business?

03 Is there a prioritised list of initiatives with business cases whose assumptions are disclosed, and a list of what we deliberately won't do?

04 Is it settled who approves AI systems, and do we know our role under the AI Act for every system?

05 Is at least one AI solution running on real data, connected to our systems, with measured quality and a known cost per case?

06 Is it clear for every solution, before launch, what permissions, logs and monitoring will look like in operation?

07 Has at least one process changed in who does what, and not only in how fast a single step runs?

08 Does every live solution have an accountable person in the business, a budget and a metric that is reported regularly?

09 Do the people who work with AI know when they can trust a result and when they need to check it?

10 Can senior leadership assess the most important AI initiatives itself, without relying on vendor claims alone?

Two noes in one pair are a clear sign of where to start.

What follows

The delta grows by itself. Every new generation of models widens the gap as long as the company doesn't catch up. Waiting is a decision too, just one that nobody has made.

It takes all five areas. Working on a single area achieves little if another one is blocking the value.

Measure before you invest. An honest assessment across the five areas costs little and stops budget ending up in the wrong place.

Sources

- Measuring AI Ability to Complete Long Tasks, Kwa et al., METR, 18 Mar 2025
- Every fifth company uses artificial intelligence (Jedes fünfte Unternehmen nutzt künstliche Intelligenz), Federal Statistical Office (Destatis), 25 Nov 2024
- Enterprises using artificial intelligence (AI) technologies, by employment size class, Federal Statistical Office (Destatis), as of 24 Nov 2025
- Reasons against using artificial intelligence technologies (Gründe gegen die Nutzung von Technologien der künstlichen Intelligenz), Federal Statistical Office (Destatis), as of 24 Nov 2025
- 20% of EU enterprises use AI technologies, Eurostat, 11 Dec 2025
- Generative AI at Work, Brynjolfsson, Li, Raymond, NBER Working Paper 31161, 2023
- Navigating the Jagged Technological Frontier, Dell'Acqua et al., Harvard Business School Working Paper 24-013, 22 Sep 2023
- Measuring the Impact of Early-2025 AI on Experienced Open-Source Developer Productivity, Becker et al., METR, 12 Jul 2025
- The Productivity J-Curve, Brynjolfsson, Rock, Syverson, American Economic Journal: Macroeconomics, 2021
- Regulation (EU) 2026/1744 (Digital Omnibus on AI), Official Journal of the EU, 24 Jul 2026



AUTHOR

Philipp Pöschke

Founder, Paice

Philipp Pöschke founded Paice in Bremen in 2026. He is personally accountable for every engagement and works hands-on on analyses, prototypes and solutions. He is the author of the articles in Insights.