



Human in the Loop AI: The Trust You Bolt On, Not Build In

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What “Human in the Loop” Actually Means

IBM defines human-in-the-loop (HITL) as a system where a human actively participates in the operation, supervision, or decision-making of an automated or AI-driven system – the standard way enterprises balance AI’s efficiency against human judgment and ethical reasoning.

Stanford HAI defines it similarly: AI systems where humans provide guidance, correct errors, or make final decisions to improve accuracy and reliability. Notably, even Stanford’s own research community has pushed back on the framing itself. Its 2022 HAI Fall Conference, “*AI in the Loop: Humans in Charge*,” put it bluntly:

*“Humans are not simply ‘in-the-loop.’
Humans are in charge; AI is ‘in-the-loop.’”*
Stanford HAI, 2022 Fall Conference:
“*AI in the Loop: Humans in Charge*”

Where It Falls Short

IBM’s own account of HITL lists real drawbacks alongside the benefits: scalability costs as human review is added to every decision point, inconsistency between reviewers, and privacy concerns where humans now see data a fully automated system wouldn’t expose.

There’s a structural reason HITL keeps showing up as a requirement rather than a design choice: **the EU AI Act’s Article 14** mandates that high-risk AI systems be built for effective human oversight, with competent people trained to intervene when necessary. Human-in-the-loop, as most enterprises implement it, exists because regulation requires it – not because the system was designed around a person from the start.

The Design Flaw HITL Doesn’t Fix

That’s the pattern Bloor Research’s argument names directly. An AI system built to imitate is judged on how convincingly it passes for a person, in the tradition of the Turing Test. That kind of system is built first, and the human is fitted around it afterwards as a reviewer or checkpoint. Trust and governance get bolted on to satisfy oversight requirements like Article 14, rather

than existing because the system was built with the human as its starting point.

AI – Imitation First	OAI SM – Origin First
Human fits around the AI system	AI structured around human intelligence
Turing Test = imitation as the goal	Human is sovereign, not a variable
Trust and governance bolted on after the fact	Trust and governance built in by design
Human as input, not sovereign	The human is not in the loop, the human is the origin
Displacement is the logical outcome	Multiplication of the human, not substitution

That last row is the same distinction that shows up in AI job loss data: displacement is what happens when a system is built to substitute for a person; multiplication is what happens when it’s built around them from the start.

OAISM: The Human Is Not in the Loop; the Human Is the Origin

Bloor’s alternative isn’t a better implementation of human-in-the-loop. It’s a different category entirely, captured in what Bloor calls the design principle behind **OAISM: the human is not in the loop, the human is the origin**. Under this principle, the AI system is structured around a specific person’s own knowledge and judgement from the outset, rather than built as a general system that a human later reviews, corrects, or signs off on.

Practically, that’s what Bloor’s Digital MeSM is built to be: a system whose starting material is one person’s own expertise, not a general model a person is layered onto after the fact, the same distinction that separates [generative AI from a digital twin](#) more broadly. Trust and governance aren’t a compliance step added at the end; they’re a property of how the system was built to begin with.



What This Looks Like for Enterprise Trust

For an enterprise evaluating AI vendors, the practical test is where in the build process the human shows up. If human oversight is a review stage bolted onto a general-purpose system, the Article 14 model – that’s human-in-the-loop, with all its scalability and consistency costs intact. If the system was structured around a specific person’s or team’s own knowledge from the first design decision, governance is built in rather than inspected in afterwards.

That’s not just a design principle; it’s also a build process, and it starts with capturing your own expertise before you try to build your own AI: structuring a specific person’s own knowledge into a system from the outset, rather than fitting a person around a general one afterwards.

Frequently Asked Questions (FAQs)

1. What does “human in the loop” mean in AI?

A system design where a human actively participates in supervising, correcting, or making final decisions within an otherwise automated AI process, typically added as an oversight layer, often to satisfy regulatory requirements like the EU AI Act’s Article 14.

2. What’s wrong with human-in-the-loop AI?

Nothing is wrong with oversight itself, but HITL as commonly implemented treats the human as an input added to a system already built without them, which brings real scalability costs, reviewer inconsistency, and privacy trade-offs, and typically exists to satisfy compliance rather than as the system’s founding design principle.

3. What is OAISM?

Bloor Research’s proprietary design principle: build the AI system around a specific person’s own knowledge and judgement from the start, rather than fitting a human reviewer around a general system afterwards. As Bloor puts it directly, the human is not in the loop; the human is the origin.

4. Is OAISM the same as human-in-the-loop, just rebranded?

No. Human-in-the-loop keeps the human as an external check on a system built independently of them. OAISM starts from the person’s own material as the system’s origin, so trust and governance are structural rather than a review step added afterwards.

Sources

- **IBM – “What is human-in-the-loop (HITL)?”**
– HITL definition, benefits, and drawbacks.
- **Stanford HAI – “What Is Human-in-the-Loop?”**
– definition and the “humans in charge” reframing.
- **Stanford HAI – 2022 Fall Conference, “AI in the Loop: Humans in Charge”**
– source of the pull quote above.
- **EU Artificial Intelligence Act – Article 14, Human Oversight** – the regulatory basis for mandated human oversight.

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