
AI Agent Collaboration: A Step Toward AGI

As AI systems become more advanced and diverse, one big question comes up: how do we move beyond narrow, single-use capabilities – toward *Artificial General Intelligence (AGI)*?

A promising path is the ability of **AI agents to work together**.

- ♦ **Collective Intelligence** – Studies show that multi-agent systems can solve complex problems better than a single agent. They divide tasks, discuss options, challenge each other – and often come up with more creative and effective solutions.

- ♦ **Flexible Teamwork** – Some setups use a “super-agent” to coordinate the process, while others run more like a flat team with no leader. Both models are inspired by how humans collaborate, and they show that real learning comes from interaction.

- ♦ **Specialized Expertise** – Like in any multidisciplinary team, each agent can focus on a different specialty: analysis, engineering, medicine, and more. By combining these perspectives, the system can see problems from new angles and generate richer insights.

- ♦ **From Research to Real Use** – Companies like AWS are already building multi-agent setups where specialists collaborate to speed up development and innovation. Anthropic has also shown that this approach improves results in complex research and search tasks.

✨ **Concrete Examples** – Amazon Bedrock uses a *super-agent* to assign tasks to sub-agents (like market analysis or financial review) and then combine their results into one clear picture. Synera applied a multi-agent approach to engineering workflows, freeing human engineers to focus on strategy and creativity. In research, Tsinghua University’s AgentVerse project showed that agents who “volunteer” or “adapt” during group discussions can raise the overall level of understanding beyond what one agent could achieve alone.


Not Just Collaboration – But the Quality of the Dialogue

What really matters is not only that agents collaborate, but **how they talk to each other**. Is the dialogue structured with clear roles, or open and adaptive? Do they challenge each other, negotiate, or brainstorm freely? Defining *conversation rules*, *interaction styles*, and even *levels of debate* can shape the final outcome.

At the same time, there’s a deeper challenge: **how knowledge is shared and how agents learn from the process itself**. Without mechanisms for transparent knowledge exchange, insights can stay siloed within one agent instead of becoming part of the group’s collective intelligence. And without self-reflection loops, agents risk repeating mistakes instead of improving over time. The real breakthrough comes

when dialogue doesn't just produce answers – but also teaches the system *how to have better conversations in the future*.

Just like with human teams, knowledge is important – but the way it's communicated, absorbed, and evolved through dialogue makes the real difference. Turning this dynamic into something we can design and control may be the key to systems that can *think together* and *learn together*, not just work in parallel.

 **The Vision** – Collaboration between agents isn't just about efficiency. It's about evolution – creating an *artificial society of minds* that can learn, adapt, and grow. Just as human teams go beyond individual talent, AI agents working together could be a catalyst on the road to AGI.

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