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**What is agentic AI, and how does it work?**

**Agentic AI, explained**

Agentic AI refers to a type of AI designed to act on its own behalf, with a level of independence and decision-making power.

This kind of AI doesn’t just process data or respond to commands; instead, it can set goals and make decisions in pursuit of those goals, often in a way that mimics human agency.

It’s like giving AI a sense of purpose and the ability to pursue that purpose with minimal human intervention.

This sets it apart from traditional AI, which typically requires human input or predefined rules for its operation. Agentic AI is self-directing, meaning it can make decisions in real-time based on the environment and its objectives.

**How agentic AI works**

Agentic AI works through a combination of advanced machine-learning techniques, decision-making algorithms and continuous feedback loops.

Think of it like a robot that learns from experience and then uses that knowledge to influence its future actions. It often works in the following way:

* **Goal-setting:** Agentic AI identifies objectives based on initial programming or ongoing environmental inputs. It might be set to achieve a specific task, like optimizing a supply chain or improving user engagement.
* **Decision-making:** It then analyzes data and uses algorithms to decide the best course of action to reach its goal.
* **Learning and adapting:** Like all AI systems, agentic AI learns from its successes and failures. It’s constantly adjusting its strategies and optimizing its decision-making processes.

The key here is the AI’s ability to set its own course of action based on real-time inputs, allowing it to act with more autonomy than traditional AI systems. So, why all the excitement around agentic AI?

**Agentic AI benefits**

Agentic AI enhances efficiency, minimizes human error, and scales seamlessly, making it ideal for industries requiring continuous optimization.

* **Increased efficiency:** Since agentic AI doesn’t need constant human oversight, it can operate around the clock, continuously learning and adapting to new data.
* **Reduced human error:** Because agentic AI makes decisions based on data and algorithms, it’s less prone to biases or mistakes that might arise from human judgment.
* **Scalability:** Agentic AI can handle large amounts of data and complex tasks across various industries, all while scaling its decision-making processes to fit the needs of a growing operation.

These benefits make agentic AI especially appealing in industries such as logistics, healthcare, finance and customer service, where constant optimization is key to maintaining a competitive edge.

**Agentic AI applications**

Agentic AI is transforming healthcare, supply chains, finance and customer service by making autonomous, goal-driven decisions.

* **Healthcare:** In medical research, agentic AI can autonomously analyze patient data, recommend treatment plans, and even suggest new avenues for drug discovery.
* **Supply chain optimization:** AI systems that can set goals, optimize routes, and make decisions about inventory management without direct human intervention are already improving efficiency in global supply chains.
* **Finance:** Agentic AI is used for algorithmic trading, where it sets financial goals and makes real-time decisions based on market data to achieve those goals.
* **Customer service:** Chatbots and virtual assistants powered by agentic AI can go beyond just answering questions — they can make decisions about resolving customer issues or personalizing customer experiences without waiting for input.

**Crypto-specific examples of agentic AI applications**

* **Crypto trading and DeFi**: Agentic AI can autonomously analyze market trends, adjust trading strategies, and optimize yield farming without human intervention.
* **Fraud detection and compliance:** Agentic AI can trace illicit transactions, flag potential money laundering activities, and enforce regulatory compliance onchain.
* **Smart contract security**: It can detect vulnerabilities, audit smart contracts, and prevent exploits by identifying suspicious transactions in real-time.
* **NFT and metaverse asset management:** Non-fungible tokens (NFTs) and virtual assets require valuation, curation and liquidity management. Agentic AI can assess market trends, predict asset appreciation, and recommend optimal buying or selling strategies for digital assets.

**Agentic AI vs. autonomous AI**

Agentic AI sets and adapts its own goals, while autonomous AI operates within predefined parameters. These two terms are often used interchangeably, but they have distinct differences.

Autonomous AI refers to AI systems that can operate without human intervention, but it typically does so within a set framework or goal defined by humans. It’s like an autonomous car that drives itself, but the parameters it follows are determined ahead of time.

Agentic AI, on the other hand, not only operates autonomously but can also set and redefine its own goals as it learns from the environment. Autonomous AI is like a car that follows a GPS, while agentic AI is a car that can decide the best route and adapt its destination based on real-time traffic data or other factors.

Here is a summary of the differences between agentic AI and autonomous AI:

**Agentic AI vs. autonomous AI**

**Agentic AI vs. AI agents vs. generative AI: Which one is more powerful?**

Generative AI creates content based on input; AI agents execute tasks based on commands; and agentic AI sets its own goals, makes decisions, and adapts to real-world feedback.

Generative AI is all about creating — whether it’s text, images, music or even videos. It doesn’t make decisions or set goals; it simply generates content based on the input it receives.

For example, ChatGPT is a generative AI. If you ask it to write an article, a poem or code, it will generate it, but it won’t decide on its own what needs to be written.

In contrast, AI agents are designed to complete specific tasks based on commands. Unlike generative AI, which produces creative outputs, AI agents focus on actions — retrieving information, automating processes, and executing user requests.

Siri and Alexa are examples of AI agents. If you ask Alexa to set an alarm, play a song, or turn off the lights, it will do it efficiently. However, it won’t decide on its own when you need an alarm or what playlist suits your mood unless you explicitly program it.

Agentic AI takes things a step further. It doesn’t just create content like generative AI or follow commands like AI Agents — it can set its own goals, make decisions, and adapt based on real-world feedback.

For example, imagine an AI-powered investment bot. A traditional AI agent can buy cryptocurrencies when you tell it to, but an agentic AI can analyze the market, set investment strategies, and adjust its approach without needing human intervention. It thinks ahead, learns from past performance, and refines its strategy over time.

Think of Agentic AI as a self-driven entrepreneur who not only works on tasks but decides which tasks are worth pursuing and how to improve them. It’s the next level of AI autonomy.

Here’s a summary of how generative AI, AI agents and agentic AI differ from each other in terms of purpose and autonomy:

**Generative AI vs. AI Agents vs. Agentic AI**

But which one is more powerful?

It depends on the use case. If you need content, generative AI could be your best option. If you need task execution, AI agents are reliable.

But if you need an AI that thinks, plans and adapts, agentic AI could be your best bet

The real breakthrough will be when all three are combined into a single system — an AI that can generate, execute and optimize decisions on its own. And it looks like that’s where AI is headed!