AI talking points in 2025

The First Step Towards the Singularity: AI Predictions for the Coming Year

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In the rapidly evolving landscape of artificial intelligence, 2025 promises to be a year of remarkable advancements. While many focus on the practical applications of AI, a closer look reveals we are on the precipice of a paradigm shift. We are not just witnessing the rise of intelligent machines; we are seeing the first steps toward a future where AI transcends human capabilities – the arrival of the singularity.

1. A Step Towards the Singularity

One of the most exciting developments in 2025 will be the widespread use of multiple AI agents working in tandem. This is also a step that brings us closer to the singularity. We are not there yet, nor will we reach the singularity in 2025. But we will see a fundamental shift in how AI operates. Instead of relying on a single AI model to generate ideas or make decisions, multiple Generative AI (GenAI) models will cross-check each other, comparing their outputs to improve accuracy and reduce errors or "hallucinations".

This concept of AI agents "talking" to each other holds incredible promise for enhancing the reliability of AI-generated insights. The ability of these models to cross-reference their conclusions reduces the likelihood of mistakes, bringing us closer to a future where AI can autonomously create, validate and refine ideas. However, with this evolution comes a new level of scrutiny. The question of trust will become central: How can we ensure that one AI's output is credible enough to be validated by another?

Transparency and accountability will be crucial to making this approach truly effective. Businesses will need to demand explanations from AI systems and understand the reasoning behind each decision made by the models. Without these safeguards, there's a risk that unchecked AI could generate inaccurate or biased information that other systems might blindly accept, potentially leading to faster dissemination of disinformation.

2. AI as a Trusted Assistant in Business

As AI technology matures, Generative AI will increasingly become a trusted assistant in business environments. Beyond its current capabilities, AI will evolve to handle more complex, automated tasks within organizations, allowing humans to focus on more strategic and rewarding roles. This transformation will be driven by AI's ability to execute mundane tasks efficiently. Employees will have more freedom to engage in creative tasks such as problem-solving and decision-making.

The development of AI as a trusted assistant hinges on its ability to provide logical reasoning and greater explainability. The need for AI to be transparent in its decision-making processes

will become a non-negotiable requirement for enterprises. Businesses will increasingly want to know the "what" and the "why" behind AI-generated decisions. This shift towards explainable AI will help address the longstanding issue of AI models being perceived as "black boxes," where their outputs are clear, but their reasoning process is not.

Logical reasoning capabilities will be a game changer, enabling AI to function as a reactive tool and proactive partner in business strategy. AI will be able to develop multiple hypotheses that lead to a conclusion, propose a process to verify them, and present the validity of the conclusion. While conventional AI derives logically correct "conclusions" from observed phenomena and known laws, retroactive reasoning, a way of thinking that derives a "hypothesis" that best explains observed phenomena, will also become possible. Drawing creative "hypothesis" from various possibilities will enable the discovery of new rules that humans cannot imagine. This movement towards reasoning and explainable AI is essential for making increasingly complex enterprise decisions, and will help build trust in AI systems as reliable, accountable assistants.

3. The Large-Scale Adoption of AI and Sustainability Concerns

The large-scale adoption of large language models (LLMs) in the enterprise space will see a significant surge in the next 12-18 months. These models excel in understanding unstructured data, which constitutes up to 90% of all enterprise data, making them invaluable tools for businesses seeking insights from vast datasets. However, to unlock the true potential of LLMs, enterprises will need to convert this unstructured data into structured formats, such as knowledge graphs, to make it more accessible for AI to process and analyze. That, too, will increasingly be done by AI.

As LLMs become more integrated into everyday business operations, one of the biggest challenges will be managing the energy consumption and carbon footprint associated with running these large-scale AI systems. The drive for sustainability will take center stage as companies seek to balance technological advancements with their environmental commitments. While AI's potential to transform businesses is undeniable, its growing impact on energy use and carbon emissions is a significant concern requiring innovative solutions.

Developing more energy-efficient AI models and computing methods will be crucial to making AI sustainable in the long term. We will see a shift towards designing AI solutions that consume less power without compromising on performance. These advancements will be key not only to reducing AI's environmental impact but also to making its large-scale deployment more feasible and cost-effective for businesses.

The next 12 months will be pivotal in shaping the future of AI. We stand on the cusp of the singularity and witnessing the rapid rise of AI-powered enterprises. It is our responsibility to ensure that principles of ethics, transparency, and accountability guide these advancements. The future of AI is not merely about technological progress; it is about building a future where AI, with its potential to empower and benefit all of humanity, fills us with hope and optimism.

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Before engaging in Artificial Intelligence, he had been working on Human Sensing technology by Computer Vision and the applied research of AI from 2017 to 2022. He had conducted a research about the energy management system from 2010 to 2016 and the information and network security from 2005 to 2009, and ubiquitous computing from 1995 to 2004. He joined Fujitsu Research in 1995. He obtained his MS in Department of Intelligence Science from the University of Tokyo Institute of Technology in 1995.