Democratizing AI: 2024 will see the end of bottlenecks holding back AI innovation and job creation

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Large language AI models like ChatGPT have exploded in visibility and popularity. So far, shortages and bottlenecks have restricted this transformative technology to the best-funded companies like OpenAI, Microsoft, Google and Anthropic, with the resources to develop and deploy it.

However, 2024 will be when AI starts to become democratized, spreading beyond the tech giants. New platforms will spark a wave of AI innovation and job creation from startups to small and mid-tier players as well as across industries.

Squeezing Out the Little Guys?

Many experts warn that smaller firms are already getting squeezed out of leveraging AI due to the massive compute requirements of systems like Bard, Claude and ChatGPT.

GPU shortages limit many companies from developing new LLMs. The costs are also prohibitive, and companies need many millions just to get started. Wired recently reported on the impact of these bottlenecks on startups and other innovators. Even the giants are struggling to get all the resources they need.

New Platforms to Democratize AI

However, promising new platforms aim to change this in 2024 by offering more accessible AI tools. Services like the Fujitsu Kozuchi (code name) - Fujitsu AI Platform allow rapid testing and deployment of AI innovations without the need for specialized skills or expensive infrastructure. There's also Cohere, whose platform gives startups access to large language models.

This approach can provide cloud-based access to generative AI models tailored for areas like chatbots, text summarization, and content creation. Users can get custom AI applications up and running in days rather than months.

Unleashing Innovation

The wider access provided by these platforms, in training employees about new processes, for example, promises to fuel AI innovation across many industries. Logistics companies can use generative AI for optimizing deliveries, healthcare providers to accelerate research, and creators to generate engaging content. In the world of anime, we have helped entertainment group Remow create an AI that can understand a writer's intentions, their worldview, and generate images that match the target color palette and deliver all the desired nuances. There appear to be few limits. We've worked with Mizuho Financial Group to develop a generative AI that checks marketing documents to make sure they all conform to brand guidelines. We'll see unique use cases unlocking business value as startups and regional firms tap into AI.

New Jobs

Critics argue that the spread of AI and automation into the wider economy will destroy jobs, especially in creative fields. But others point to new opportunities that will emerge. Online news platform <u>Semafor</u> wrote recently about how these very shortages and bottlenecks are stimulating a new wave of business startups, investment, and jobs aimed at solving today's and tomorrow's AI challenges.

McKinsey predicts that generative AI could add up to \$4.4 trillion to the world economy annually across just 63 use cases. That's over 40% larger than the UK's entire GDP. The report's writers believe that their estimate could double if generative AI were embedded in software beyond those use cases.

Domain experts like architects can work with Generative Design AI to create better buildings while still leading projects. Rather than make jobs redundant, AI can enhance human capabilities.

Of course, this is with the provision that shortages and other bottlenecks can be overcome. Democratized AI will magnify these effects across whole new sectors.

Concerns Remain

Despite the promise, ethical issues around democratized AI persist. Wider availability risks irresponsible use or bias. Platforms like Kozuchi aim to address these dangers through AI trust technologies that deliver transparency, accountability, security, and bias mitigation.

The Fujitsu Kozuchi AI platform features the Fujitsu AI Ethics for Fairness tool, which tests the fairness of AI models. This tool is one of the best-of-breed tools available on the platform from Fujitsu, which has also launched new technologies to protect conversational AI from hallucinations and adversarial attacks. These technologies detect malicious data by processing information with various different AI models and evaluating the difference in rationale for the judgment result.

The Road Ahead

In the years beyond 2024, AI democratization through new platforms will enable broader innovation, the creation of highly skilled jobs, and responsible adoption.

Much as PCs, mobile and cloud expanded economic activity hugely and opened technology to the masses, AI platforms can spread benefits through multiple industries.

The long-term shift from an exclusive tech to a universally available one calls for continued research and open dialogue to guide progress responsibly. Only by working together can we craft an AI-powered, human-centric future with shared prosperity.

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