# The evolving landscape of artificial intelligence in 2023



In 2023, the landscape of artificial intelligence (AI) has evolved significantly as businesses across various sectors have begun integrating AI automation into their operations, transitioning from mere experimentation to practical implementations that significantly drive growth. According to Arvind Narayanan, a computer science professor at Princeton University and co-author of “AI Snake Oil: What Artificial Intelligence Can Do, What It Can’t, and How to Tell The Difference,” there has been a notable shift in focus from developing AI models to building usable products. Narayanan noted, “The main thing that was wrong with generative AI last year is that companies were releasing these really powerful models without a concrete way for people to make use of them.”

Technological advancements in generative AI, such as OpenAI's GPT-4 and other competitive large language models, have catalysed widespread integration into everyday services. For instance, AI-generated answers now appear in Google search results, enhancing user experience without them explicitly seeking out this technology. The push for operational improvements through AI is reflected in various ongoing projects across different industries, where companies are harnessing these tools for more productive work processes.

Despite its potential, the cost of developing and maintaining advanced AI systems has drawn considerable attention. Analysts from Goldman Sachs, including Kash Rangan, have indicated that substantial investments, estimated in the hundreds of billions of dollars, are being dedicated to AI research and development. The quest for AI has led some technology giants to even explore nuclear power deals to manage the intensifying energy demands of their infrastructure. Rangan stated, “We had this fascination that this technology is just going to be absolutely revolutionary, which it has not been in the two years since the introduction of ChatGPT. It’s more expensive than we thought and it’s not as productive as we thought."

Amid these developments, the road to AI integration presents mixed feelings among the workforce. Some companies, like Borderless AI, are leveraging AI chatbots to handle employment contracts without relying on traditional legal support or translators. The application of AI, however, raises concerns among certain professional groups, such as video game performers who fear that AI could replace their roles by mimicking their performances. This apprehension contributed to a protracted strike by the Screen Actors Guild-American Federation of Television and Radio Artists last year, where negotiations included measures to protect workers from the adverse implications of AI technology.

Moreover, the creative limitations of generative AI have been highlighted by experts like Walid Saad, a professor of electrical and computer engineering at Virginia Tech. Saad emphasised that while AI can analyse data and generate outputs based on learned patterns, it lacks the innate understanding and common sense that humans possess. “AI tools currently don’t understand the world,” he said, adding that future advancements must focus on achieving greater creativity and an understanding akin to human reasoning.

Looking ahead, industry leaders like Vijoy Pandey of Cisco's Outshift predict the emergence of AI tools functioning more like 'agents' capable of complex reasoning and multitasking, akin to human collaborative problem-solving. He believes that future AI systems will consist of specialised agents working together seamlessly, enhancing efficiency across various applications, including cryptocurrency software.

In the medical sphere, AI applications have made notable strides. The recent Nobel Prize in Chemistry recognised advancements led by Google that could hasten the discovery of new medicines. AI has also proven beneficial in providing faster diagnostics, allowing healthcare providers to identify potential issues expeditiously. According to Cisco's Pandey, AI's ability to bridge the gap between experimental and analytical phases in pharmaceutical development has dramatically reduced what was traditionally a years-long process to just a few days.

The integration of AI into business practices signifies a critical moment in technological evolution. While challenges and concerns persist, the ongoing developments indicate that AI’s role across various sectors will continue to expand, redefining operational capabilities and efficiencies.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

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