# Cisco aims to boost developer productivity tenfold with OpenAI’s Codex integration



Cisco is increasingly focusing on artificial intelligence to enhance developer productivity, with OpenAI’s Codex coding agent at the forefront of this strategy. Codex, a cloud-based platform designed to assist with numerous programming tasks, including writing features, debugging, and proposing code changes, promises to transform the way engineers work. According to Jeetu Patel, Cisco’s Chief Product Officer, the company is investigating how Codex can catalyse a tenfold increase in productivity, allowing ambitious ideas to be actualised faster.

Patel articulated this vision in a recent blog post, positing that “software engineering is incredibly high-leverage.” He emphasised that AI’s ability to manage and improve code serves as a significant advantage across various industries. This exploration extends to Cisco's broader ambitions concerning the integration of AI into its operations, portraying a future where myriad AI agents operate collaboratively. However, the seamless execution of this vision hinges on the development of ultra-fast, low-latency, energy-efficient networks.

This sentiment was echoed by Cisco CEO Chuck Robbins during a recent earnings call, where he highlighted the growing significance of Cisco’s technologies for web-scale customers engaged in AI training. Robbins noted that the network infrastructure is pivotal to facilitating the performance of AI applications, thereby reinforcing the need for advancements in networking technology.

The integration of AI into Cisco’s processes raises questions regarding the potential impact on the workforce. Patel cautiously addressed the implications of implementing such AI-driven technologies. He suggested that attracting top-tier developers is paramount for Cisco, stating that the company aims to provide tools enabling engineers to realise their full potential. This rationale comes in the wake of job cuts within the tech industry, as seen with Microsoft and Cisco, which have both restructured their workforces to align with their AI and cloud strategies. Cisco's Chief Financial Officer, Scott Herren, attempted to mitigate concerns regarding these layoffs, framing the situation as a “reallocation” of resources rather than a simple reduction of headcount.

Despite the uncertain atmosphere surrounding job security, the financial return on Cisco’s AI investments is becoming evident. The networking giant reported a significant increase in sales driven by AI-related infrastructure, surpassing initial forecasts. This uptick included $600 million generated from web-scale customers and $700 million for the fiscal year, demonstrating the commercial viability of their AI initiatives.

The broader implications of AI tools like Codex are being closely observed by industry analysts. While AI can act as a productivity enhancer, experts are wary of the potential for replacing human developers. Kate Holteroff, an analyst at RedMonk, expressed doubts about the immediate operational cost savings often cited by tech executives, noting that AI tools currently serve as assistants and still require human oversight.

The integration of AI within Cisco's products is not limited to software development. In June 2023, the company announced the incorporation of generative AI features across its Collaboration and Security portfolios, enhancing productivity and operational efficiency for enterprise users. This includes new capabilities in Webex that utilise AI for summarising meetings and improving user experience.

Furthermore, Cisco is venturing into network automation by unveiling a plugin called networkGPT, designed to merge OpenAI’s ChatGPT with Cisco’s networking tools. This innovation seeks to facilitate AI-driven interactions for better network management, embodying Cisco's commitment to leveraging technological advancements in operational efficiency.

As AI technology continues to evolve, its role in software development remains a topic of great scrutiny. While tools like OpenAI's Codex and GitHub Copilot are being adopted for their ability to save time and automate repetitive tasks, experts agree that these technologies are not replacements for the nuanced skills of human developers. The future will likely entail a collaborative relationship between AI tools and human expertise, ensuring that the complexities of software development are efficiently navigated while retaining the essential human element.

**Reference Map**

1. Paragraphs 1, 2, 3, 4, 5
2. Paragraph 1
3. Paragraph 6
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6. Paragraph 6
7. Paragraph 9

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

## Bibliography

1. <https://www.sdxcentral.com/news/cisco-ogles-openais-codex-to-drive-developer-productivity/> - Please view link - unable to able to access data
2. <https://www.sdxcentral.com/news/cisco-ogles-openais-codex-to-drive-developer-productivity/> - Cisco is exploring the use of OpenAI's Codex AI coding agent to enhance developer productivity. Codex is a cloud-based platform capable of performing tasks such as writing features, answering codebase questions, fixing bugs, and proposing pull requests. Jeetu Patel, Cisco's Chief Product Officer, highlighted the potential for Codex to help engineering teams bring ambitious ideas to life faster, aiming for a tenfold increase in productivity. Cisco envisions a future where billions of AI agents work harmoniously, emphasizing the need for ultra-fast, low-latency, energy-efficient, and secure networks to support this vision.
3. <https://www.businessinsider.com/codex-github-copilot-chatgpt-openai-productivity-2023-3> - GitHub Copilot, powered by OpenAI's Codex, assists developers by suggesting code snippets and functions, effectively acting as an AI pair programmer. Launched in 2021, Copilot has been reported to save developers significant time by automating repetitive coding tasks. For instance, Bill Mers, VP of Engineering at LookDeep Health, estimated that Copilot saved him 10% of the time he would normally spend coding. The tool has been particularly useful for tasks like creating databases, where it can quickly generate standard code structures.
4. <https://investor.cisco.com/news/news-details/2023/Cisco-Unveils-Next-Gen-Solutions-that-Empower-Security-and-Productivity-with-Generative-AI/default.aspx> - In June 2023, Cisco announced the integration of generative AI features across its Collaboration and Security portfolios. These new capabilities aim to drive productivity and simplicity for enterprise users. Notably, Webex by Cisco introduced generative AI-powered summarization features to enhance meeting experiences. Additionally, Cisco's Security Cloud previewed AI capabilities designed to simplify policy management and improve threat response, reflecting Cisco's commitment to leveraging AI for enhanced security and operational efficiency.
5. <https://community.openai.com/t/cisco-live-2023-networkgpt-unveiled-a-plugin-for-cisco-networks/262552> - At Cisco Live 2023, a new plugin named networkGPT was unveiled, designed to integrate OpenAI's ChatGPT with Cisco's network automation tools. This plugin aims to enhance network operations by enabling AI-driven interactions and automation within Cisco's networking environment. The session highlighted the potential of combining ChatGPT's language processing capabilities with Cisco's network automation to streamline network management tasks and improve operational efficiency.
6. <https://www.infoq.com/news/2024/09/copilot-developer-productivity/> - A study published in September 2024 examined the impact of AI coding assistants like GitHub Copilot on developer productivity. The research found that developers using Copilot experienced a 26.08% increase in the number of pull requests completed per week. The study also noted that less experienced developers benefited more from Copilot, suggesting that AI tools can be particularly advantageous for novice programmers in enhancing their coding efficiency.
7. <https://spectrum.ieee.org/amp/openai-wont-replace-coders-2655177877> - An article from IEEE Spectrum discusses the limitations of OpenAI's Codex in replacing human coders. While Codex can assist with generating code, it cannot fully replicate the comprehensive tasks performed by developers, such as understanding client requirements, designing software, and addressing complex problems. The article emphasizes that Codex is a tool to augment developers' capabilities rather than replace them, highlighting the ongoing need for human expertise in software development.