

Education case study

Gen Al in education: Study tutors accelerate revenue growth with 10K daily users

A tech-savvy education company launches an innovative solution from POC to market in six months—and earns rave reviews: 70% of students rate it extremely useful.



At a glance

Industry Education

Location North America

Challenge

Quickly develop a generative Al-enabled study tool to integrate into the edtech company's flagship product and provide personalized learning experiences. Success Highlights

- 10,000 daily active users
- 5% growth in sales during the back-to-school period when the study tutor was introduced
- 70% of students rate the study tutor as extremely useful
- 38% of students ask complex questions associated with critical thinking skills
- 4X more students using the AI tools remained or became active studiers compared to those who didn't

The challenge



As a major player in online learning, the edtech company is widely admired for its sophisticated application of technology in its products and services. To further sharpen its competitive edge, it hosted a hackathon. Among the winning ideas was a demo for a generative AI study tutor integrated into digital course materials. The study tutor, a collaboration between the client and Cognizant, would provide chapter summaries and generate sample multiple choice questions to help students prepare for exams. The gen AI solution dovetailed with the company's strategic plans and was chosen to move into a proof of concept (POC) and, if proven feasible, a commercial product release.

Our approach

The development of the study tutor was exciting—and timeboxed. It required quickly mastering gen AI skill sets and readying the new educational tool for release during the prime back-to-school season.

Our team's first step was to evaluate the gen AI solution's feasibility. In keeping with the agile spirit of the hackathon, we quickly confirmed the study tutor's commercial viability and identified the tools and resources needed to make it work.

Next, we moved to develop a minimum viable product (MVP). Because gen Al was new for everyone, the team took time to explore, understand and learn the large language models (LLMs). For example, a key feature of the solution is its content summarization. To ensure the summaries' accuracy, the feature went through multiple review cycles with the content authoring teams, including review of the UAT.

After six months of the hackathon, the study tutor reached 95% accuracy. We developed a pilot for two titles and rolled it out to a small group of universities and students before expanding to a larger audience.

Among the solution's most innovative aspects was the learning on the fly that it required. With the POC launching just weeks after OpenAI's ChatGPT had exploded onto the technology scene, Cognizant and the client's team collaborated to master generative AI skills quickly and develop the study tutor into one of the first products rolled out to the education market.



Business outcomes

The months of development resulted in a study tutor that's a fully personalized tool. In addition to summarization and practice questions, students can opt for adaptive, individualized learning experiences. For example, they can request explanations based on selected content and embedded media such as images. The tool also supports voice-enabled interactions.

To gauge interest in applying gen AI to other projects, the company surveyed internal teams. The positive response paved the way for collaboration by the client and Cognizant on a gen AI platform that can be used for multiple projects. The platform enables the company to rapidly prototype and test gen AI solutions.

The project delivered big business benefits for the client. Today, it has 600-plus gen Al-enabled titles in the market, and the number of daily active users has grown to 10,000. The company's sales grew 5% during the period in which the study tutor was introduced. After a North American rollout, the company is now expanding it to global titles.

Perhaps even more impressive is the company's research into how students use the AI study tutor. For a specific science textbook, the analysis found that while most students use the gen AI tools for foundational learning, 38% ask cognitively complex questions associated with critical thinking skills. What's more, students using the AI tools are four times as likely to remain or become active studiers compared to those who didn't. 70% rate the study tutor as extremely useful.

By pioneering one of the first generative AI solutions in the education space, this edtech company secured a critical first-mover advantage. The rapid six-month development from hackathon concept to commercial product with 95% accuracy demonstrates the power of agile innovation. As the solution expands globally, it positions the company as an AI leader in education while creating a foundation for future AI-powered learning experiences that will continue transforming how students engage with course materials.



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World Headquarters

300 Frank W. Burr Blvd. Suite 36, 6th Floor Teaneck, NJ 07666 USA Phone: +1 201 801 0233 Fax: +1 201 801 0243 Toll Free: +1 888 937 3277

European Headquarters

280 Bishopsgate London EC2M 4RB England Tel: +44 (01) 020 7297 7600

India Operations Headquarters

5/535, Okkiam Thoraipakkam, Old Mahabalipuram Road, Chennai 600 096 Tel: 1-800-208-6999 Fax: +91 (01) 44 4209 6060

APAC Headquarters

1 Fusionopolis Link, Level 5 NEXUS@One-North, North Tower Singapore 138542 Phone: +65 6812 4000 Email: inquiry@cognizant.com

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