Case Study

Enhancing Learning in Statistics through AI-Driven Content Generation and Feature Development

Magic EdTech

The Client

The client, a dynamic U.S.-based K-12 edtech company, stands at the forefront of innovative learning solutions. Their mission revolves around catering to the evolving learning needs of today's students, driven by insights from educators and rooted in research-backed curricula.

The Challenge

The challenge was to create a novel, student-centric "intervention" feature specifically targeting statistics education. This feature aimed to provide comprehensive answer explanations, elucidating the reasoning behind solving statistics problems. The goal was to scaffold student learning, offering support in mastering this domain.

Critical Success Parameters

✓ Develop 55 lessons encompassing explanatory text for a multitude of statistics problems, elucidating each solution's steps.

✓ Implement the answer explanations swiftly, aligning with the academic year's commencement.

✓ Author and edit the explanations at a cost lower than industry benchmarks for similar SME-driven content.

Our Approach

✓ AI Model Implementation: Magic's in-house AI engineers meticulously selected and trained a model to generate the initial drafts of answer explanations.

✓ Human Validation: A specialized content team comprising SME and former statistics educators meticulously reviewed and edited the AI-generated explanations. Their focus lay on ensuring accuracy, clarity, and maintaining a consistent tone and style aligned with the educational content.

✓ Iterative Refinement: Ongoing feedback loops between the content team and AI engineers facilitated iterative enhancements, fine-tuning the AI-generated content at scale.

✓ Cost Efficiency Strategy: Despite investing in AI prompt engineers and human review, Magic succeeded in passing back savings of over 10% to the client. There's a promising outlook for further cost reductions with increased scale and widened scope.

Key Result Highlights

Successfully created answer explanations for a comprehensive set of **55** statistics lessons.

Elaborated explanations covering a multitude of assessment items within the curriculum.

Accomplished the development and integration of the answer explanations within a swift **8**-week period, meeting the client's stringent deadline requirements.

Achieved a remarkable **10%** cost savings for the client in the initial phase (with more promised at greater scale).