

Click on the content you want to know more about.

MENU.
Click to return
to this page.

THE CHALLENGE

CONTEXT

STRATEGIC ALTERNATIVES

**THE DECISION** 

**REFERENCES** 

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# THE CHALLENGE

The development of technological products that use artificial intelligence (AI) is facing increasing challenges. One of the most sensitive aspects is how to manage algorithmic biases and their impact on different user groups. As tech companies accelerate the integration of AI into their products to compete for market share and relevance, they are also forced to make complex decisions regarding transparency, inclusion, privacy, and data control (O'Neil, 2016; Crawford, 2021).

In this context, the case of Khan Academy and Duolingo presents an exemplary contrast in how different organizations face the challenges of integrating generative AI into their business models. Both companies developed products based on GPT-4; however, their guiding principles, levels of openness, and implications of their models have been very different. This contrast allows us to analyze how organizational culture, revenue models, and relationships with end users deeply influence decisions about innovation, ethics, and sustainability (Holmes, W., & Porayska-Pomsta, K., 2023; Malik, A., 2023).

Al-powered technology faces challenges not only related to technical accuracy but also with the ethical and social dilemmas posed by its implementation. NAM HEIGHT WEIGHT ADDRESS **PERSONAL DATA** OTHER

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### CONTEXT

Khan Academy, a nonprofit organization dedicated to free education, has been known for its strong commitment to equitable access and transparency. In 2023, it launched Khanmigo, a tutoring assistant based on GPT-4 developed in collaboration with OpenAI. The organization has been explicit about its efforts to mitigate bias, protect student privacy, and use AI as a pedagogical tool—not as a teacher replacement. Additionally, Khan Academy has prioritized educator feedback in product iteration, integrating evidence-based learning principles (Holmes, W., & Porayska-Pomsta, K., 2023; Goldstein, D., 2024).

On the other hand, Duolingo, a for-profit language learning startup, launched Duolingo Max, also powered by GPT-4. Its

Education . . . . . Both companies faced similar decisions regarding development speed, user experience control, and monetization, but resolved them differently, resulting in contrasting business models and educational experiences.

approach focused more on gamification, personalized experiences, and premium monetization. Although Duolingo also stated ethical principles for AI use, its level of openness about model functionality, bias management, and data usage has been less detailed than Khan Academy's. In this regard, users and critics have pointed out risks associated with designing AI-based expe-

riences without sufficient human oversight or pedagogical explanation (Bicknell, K. et al., 2023; Mohamed, 2024).

This context offers an opportunity to compare not only technological innovation models but also the long-term implications of their strategic decisions (Chakravorti, B., 2024).



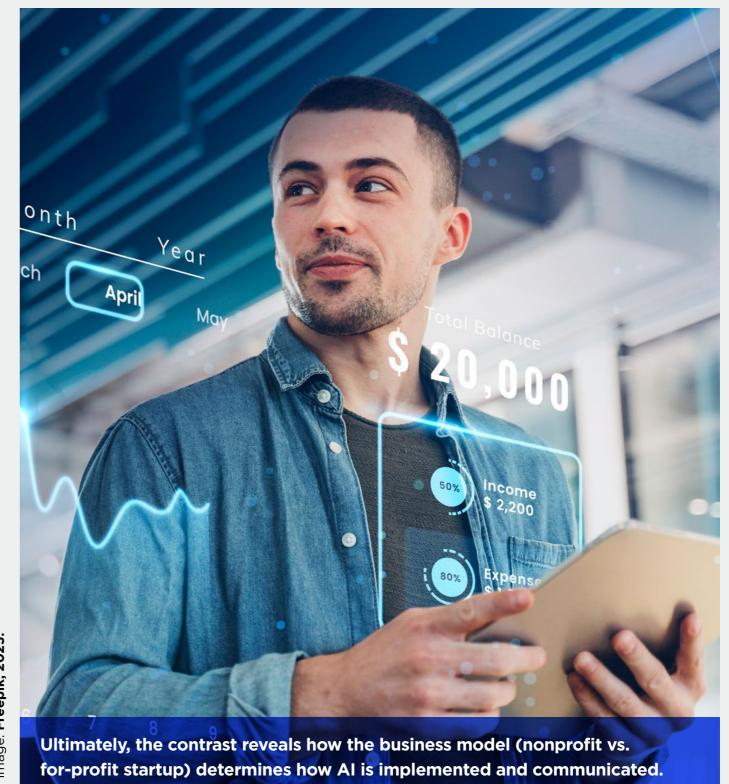


## ALTERNATIVE STRATEGIES

Khan Academy chose a careful and gradual integration of AI, keeping its educational mission at the core. It prioritized transparency, privacy, and collaboration with educational communities; decisions that fostered greater trust within the educational ecosystem. This approach also meant slower progress and limited resources, but reinforced its institutional positioning as an ethical reference in educational AI (Holmes, W., & Porayska-Pomsta, K., 2023).

In contrast, Duolingo pursued a more aggressive market strategy, integrating generative AI into a premium subscription model with experiences closer to personalized entertainment. This attracted new users and increased revenue per user, but raised concerns about the impact on learning quality and equitable access to content (Malik, A., 2023).

Both decisions reflect real tensions between ethics and scalability, personalization and control, and innovation speed versus institutional responsibility.



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### THE DECISION

Esto plantea preguntas críticas: The leadership teams of both organizations faced a key decision: how to integrate generative AI into their products without compromising trust, educational quality, or organizational principles. The differences in their innovation models represent opposing paths that could determine their long-term success or failure.

This raises critical questions:

What lessons can be learned from Khanmigo's ethical approach versus Duolingo Max's more commercial strategy?

How do business model incentives influence the way AI-based innovation is implemented?

What risks does each organization face in terms of reputation, sustainability, and user trust?

How can a hybrid model be built that combines scalability with ethics and transparency?

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