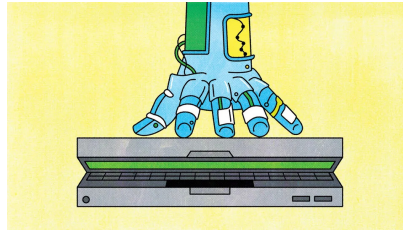


What ChatGPT's corporate victims have in common



The first casualties of generative AI offer lessons for other businesses

In less than four years the share price of Chegg, an online education service, has dropped by 99%. A post-pandemic slump in digital learning is partly to blame for its tumble. A bigger problem for the company, though, is artificial intelligence (AI). Its customers are mostly students who want help answering their homework assignments, which often involves the virtual support of a human tutor. The rise of ChatGPT and its kind have created a free substitute for that service. The firm said that it would fire a fifth of its workforce.

Chegg is one of an emerging group of firms that have already been pummeled by ChatGPT-like generative AI. Two others stand out: Stack Exchange, which runs Stack Overflow, an online forum for software developers, and RWS, a translation service. These emerging AI victims offer clues as to when a business may be strengthened by the technology and when it will be upended.

For years Stack Overflow was the go-to place for developers to get help with tricky coding problems. Many are now turning to code-writing AI assistants instead. Two-fifths of coders say they use such tools. Stack Overflow's monthly internet traffic has fallen by half over the past two years. Last year the company went through two rounds of layoffs, firing about a third of its workforce in total.

Translation services have been hit by AI, too. In the six months to March RWS's revenue fell by 4%, year on year, while profits fell by 16%. Investors, fearful of AI's impact, have sent its share price down by 57% since the launch of ChatGPT in November 2022. Earlier this year, Ian El-Mokadem, its boss, said he would resign in 2025.

Examining these AI victims suggests three lessons for businesses. The first is that the threat to incumbents from the technology is greater in industries where the potential damage done by AI hogwash (known as hallucinations) is low. Error-strewn code is a worry for developers, but problems are typically easy to spot before the software is deployed. Flawed translations can be easily corrected. If an AI tool makes up facts when writing an undergraduate's history essay, the ramifications are small (though perhaps less so for the student if they are caught using an AI tool). Errors when writing up a legal contract or a medical prescription, by contrast, are more costly. AI services will take longer to gain ground in industries that are more sensitive to made-up nonsense.

A second lesson is that businesses are most at risk when off-the-shelf AI can replicate what they do with little customisation. Tools like ChatGPT can already help with translating text, writing code or rattling off events from history. There is a long tail of things that, with further tailoring, an AI tool could potentially do, such as planning and booking holidays or finding and liaising with job candidates. But for now, travel agents and recruiters look safe.

A final lesson is that, if your company is squarely in the AI firing line, using the technology to develop an original product may help shield you. Chegg is working with Scale AI, a startup, to offer students machine-generated answers to questions that would have previously been written by humans. RWS has an AI-powered translation tool. Stack Overflow now helps users perform an advanced search of its website, among other things.

The problem is that these applications are rather uninspired. But consider Duolingo, a language-learning app. ChatGPT can imitate a half-decent French tutor and the cost to users of an AI-induced error is low. Nevertheless, shareholders are starting to think of Duolingo as an AI winner. In September it unveiled a video-chat feature that lets customers practise their language skills with an AI-generated character called Lily. On November 6th this sarcastic, purple-haired avatar joined the firm's earnings call and presented its results. Analysts and investors swooned; the firm's share price rose by 6% over the next few days. As AI upends more industries, clever innovation is the best way for would-be victims to escape their fate.

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