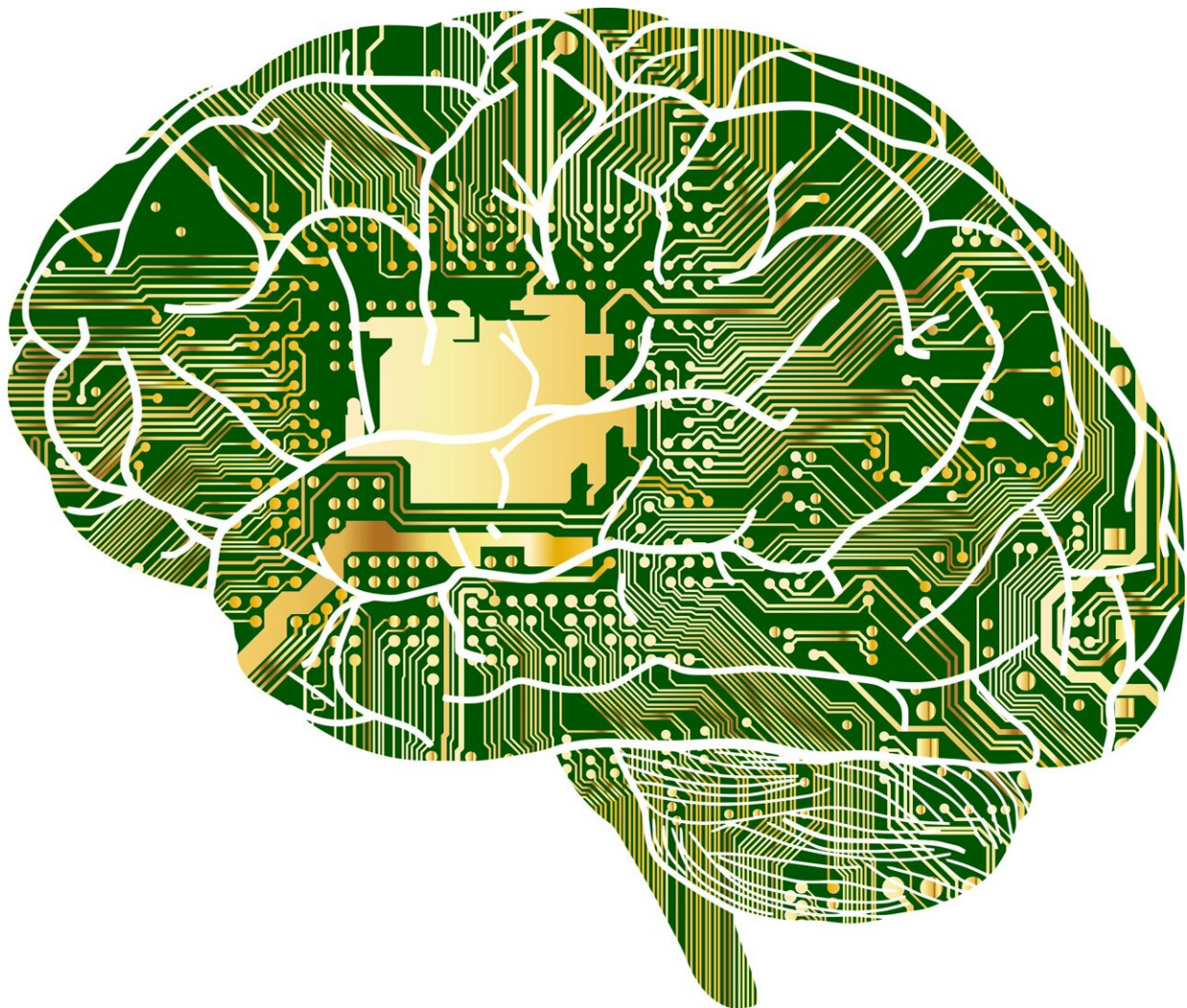


# AI helped protect businesses from COVID-19 risks

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A new study has found that artificial intelligence (AI) apps helped protect small and medium-sized businesses against many of the risks that emerged during the COVID-19 pandemic—yet only a quarter of small firms currently use them.

The research, undertaken by Anglia Ruskin University (ARU) and published in the journal *Information Systems Frontiers*, surveyed 317 small and medium sized firms based in London. The study found the use of AI-powered apps was associated with a 3.1% reduced risk to [business](#) during the [pandemic](#).

The COVID-19 pandemic has created risks for economies and business operations, with customers stopping, reducing, or postponing purchases, thereby affecting supply chains and resulting in difficulties in sourcing alternative suppliers.

Business risks were defined by a 60-point scale developed by the International Labor Organization's (ILO) that measures the pandemic's impact on staffing, processes such as working patterns, reduced profits, and threats to partnerships.

AI software utilized by businesses include chatbots to allow swift interaction with customers, apps that identify damaging fake reviews, and apps that use algorithms to improve customer targeting based on their habits, social media activities and profiles, online activities, and past transactions.

The study found the use of AI apps to offer personalized shopping suggestions was associated with 2% lower business risks to profits caused by the COVID-19 pandemic. The use of AI apps to target audience online was associated with 1.2% lower overall business [risk](#).

However, the research revealed that only 26% of small enterprises were

utilizing AI applications, considerably lower than the 70.4% of medium-sized businesses.

Lead author Professor Nick Drydakis, Director of the Centre for Pluralist Economics at Anglia Ruskin University, said: "SMEs can invest in AI technologies to track users' habits and provide recommendations, improve customer's purchasing decisions, [search results](#), media communication, trade raise sales, improve organizational performance, and lower costs.

"AI can help SMEs to adapt to unprecedented conditions, meaning they can leverage technology to meet new types of demand, move at speed to pivot [business operations](#), boost efficiency and reduce their business risks.

"We found that SMEs' business risks caused by the COVID-19 pandemic declined with the use of AI applications across a ten-item scale including marketing, sales, communication, predictions, pricing and [cash flow](#), fake reviews, cybersecurity, recruitment, and legal services.

"The outcomes proved true regardless of enterprise size, turnover, and years of operation, indicating that AI applications have helped SMEs to adapt to unprecedented conditions during the COVID-19 pandemic.

"It seems investment in AI apps could be a smart move for the three quarters of small businesses that do not currently utilize them."

**More information:** Nick Drydakis, Artificial Intelligence and Reduced SMEs' Business Risks. A Dynamic Capabilities Analysis During the COVID-19 Pandemic, *Information Systems Frontiers* (2022). [DOI: 10.1007/s10796-022-10249-6](https://doi.org/10.1007/s10796-022-10249-6)

Provided by Anglia Ruskin University

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