Generative AI's Killer Enterprise App Just *Might* Be ERP

The integration of gen AI with ERP systems can save employee time, streamline business processes, and help expedite bill collection. Some even see an autonomous future for the old enterprise standby.

Enterprise resource planning (ERP) is ripe for a major makeover thanks to generative AI, as some experts see the tandem as a perfect pairing that could lead to higher profits at enterprises that combine them.

The use of gen AI with ERP systems is still in its early days, but the combination is expected to provide several benefits, including helping employees create specialized ERP functionality on their own through code wizards, says Liz Herbert, a Forrester analyst and lead author of the report, "How Generative AI Will Transform ERP."

Some organizations have been using traditional AI with ERP systems for years, for example, for forecasting market trends or optimizing supply chains. But newer generative AI capabilities will also release employees from repetitive work involved in core business processes, the report says.

"Gen AI will free finance and operations employees from cumbersome tasks such as narrative reporting, customer collection emails, and account summarization," Herbert writes in a blog post. "Instead of monotonously and manually performing these tasks themselves, employees will act as human reviewers of the AI-generated work."

Freed from these tasks, employees will have more time to work on other tasks, leading to increased productivity, she says. At the same time, gen AI will make bill collections faster and cheaper, leading to increased profits, the report adds.

Because the use of gen AI in ERP systems is still in its infancy, IT leaders are still figuring out how to calculate the ROI, Herbert adds. However, companies are moving forward with gen AI projects for ERP — a big topic at the SAP Sapphire conference in early June — with some building their own AIs, others working with AI developers, and many using a combination of internal development and outside assistance, she says. For most companies, "it's kind of foolish to try to do it yourself," she says.

Eating your own dog food

Forrester's report resonates with Omar Kouhlani, CEO of Runmic, developer of an AI-powered app used to analyze meetings and sales calls. The company not only uses AI in its conversation analysis platform, but for nearly a year, it has used AI internally in some of the ways the Forrester report describes.

For example, Runmic uses AI to generate reports, draft emails, and assist with code development and testing, Kouhlani says, adding that some of these tasks had previously taken employees hours to complete.

"Now they merely review AI content and can get back to more strategic tasks," he says. "It's executing our mundane tasks, providing accurate and timely insights while we focus on strategic planning and decision-making."

It's difficult to estimate cost savings at Runmic because the company embraced AI early in its short history, Kouhlani says. However, he estimates employee time savings of 20% or more.

Still, AI has other limits, Kouhlani acknowledges. For example, Runmic focuses heavily on data security, and it pays attention to the changing regulatory landscape governing the use of AI, he says.

AI-generated materials also need some oversight. "At the end of the day, human eyes are still required to review the work done by the AI," he says.

Customers want AI

Executives at NILG.AI, an AI training and development firm, and VAI, an ERP software developer, see a rising demand for the pairing of AI with ERP systems.

NILG.AI has helped dozens of customers integrate AI with ERP and CRM systems, says Kelwin Fernandes, company CEO and cofounder. CRM optimization, focused on the customer journey, is a common entry point for AI, but Fernandes sees AI also used with ERP to assist with demand forecasting, pricing, extracting unstructured data, and for scheduling, ticket routing, and other operational efficiencies.

"I would say that any process where a decision is made is a potential target for AI," he says. "That being said, the core should be in those decisions that represent a bottleneck to the company and where existing data can support a better outcome."

However, AI isn't the right choice for every process, Fernandes says. AI should be used in processes with no clear answer and with an acceptable error rate.

"Unlike traditional software development, you cannot fully control and understand AI outcomes," he says. "You must incorporate a fallback plan to handle errors even in such cases."

However, companies live with a tolerance for errors in several business processes, he notes, including planning for production capacity based on estimates of demand. "As long as AI can provide a more accurate prediction than a human, it's easy to embrace," he says.

Like Runmic, VAI, an ERP developer focused on the midmarket, uses AI internally, says Kevin Beasley, CIO at VAI. Through a partnership with IBM, the company began using traditional AI for analytics in 2016, to demonstrate the power of AI to customers, he says.

VAI also uses AI, alongside a mobile app, to enhance customer warehouse operations. Beasley also sees VAI's midmarket customers embracing AI-powered chatbots that can be trained to understand company- or industry-specific information using retrieval-augmented generation (RAG) techniques.

First, identify a problem

Small and midsize companies are on an AI "buying spree," Beasley says, and AI can be an equalizer that helps midmarket companies compete with larger enterprises. But companies should first identify a problem AI can solve, he advises.

"Midmarket companies don't have endless resources to experiment with AI," he says. "They need the best bang for their buck, with solutions that address specific challenges."

There's a temptation for companies, in this AI gold rush, to

begin playing with AI and shoehorn it into places where it's not the right fit, he adds. "Obviously, you can experiment with things, and sometimes, you can create something you never knew you needed."

Beasley sees the biggest opportunities for the midmarket at the intersection of e-commerce and AI. E-commerce can involve nearly all parts of a company's supply chain, including ordering, marketing, and delivery, he says.

Beasley and Runmic's Kouhlani advise companies to start small when incorporating AI with ERP systems. Some failure should be expected.

"Start surveying what gen AI can do for your ERP," Kouhlani says. "Then, as you would onboard a junior intern, assign low-risk tasks such as routine reporting or data entry, where errors have minimal impact. Closely monitor the gen AI output, and if satisfied gradually expand its role in your ERP."

While the use of gen AI with ERP systems is a new phenomenon, Kouhlani sees the potential for autonomous ERP systems that automatically adapt to changing business conditions and correct course in real time.

"I also see AI taking a more prominent role in strategic planning, helping to simulate complex business scenarios at lightning speed and helping to evaluate potential outcomes," he says.