

4 steps to deliver successful AI projects

Many enterprise AI models are never deployed. Here's how to change that.



These days it seems like artificial intelligence (AI) is everywhere. It's in the cars we drive, the devices we carry, and our enterprise technology stacks. IDC predicts organizations will spend more than \$500 billion on AI hardware, software, and services in 2023, and that amount is growing at nearly 20% per year.¹

AI technology is playing an ever-increasing role in helping business leaders make critical decisions. The ability to unlock insights from data can be a key differentiator in how businesses design products, manage supply chains, detect fraud, secure their networks, and much more.

But most enterprises are still not seeing as much value from their AI investments as they should. That's because as many as four out of five AI models that are developed are never put into production.²

A variety of possible issues cause this failure, notes Arti Garg, distinguished technologist at Hewlett Packard Enterprise.

One common reason is the model may not make predictions that are accurate for a given business decision. Even if models deliver insights that meet your requirements, you may lack the resources to deploy them into a production environment. Further, leveraging the insights delivered by some AI models to make better decisions may require organizational or technological changes you are not prepared to make. And even if an AI model meets the requirements to deliver the desired insights, it may not address a problem critical enough to be worth the effort of deployment because the business did not bring its domain experts into the process early enough.

However, says Garg, there are steps you can take to ensure you're able to create AI solutions that allow you to unlock insights that drive business decisions.

¹ "IDC Forecasts Companies to Increase Spend on AI Solutions by 19.6% in 2022," IDC, February 2022

² "Models Are Rarely Deployed: An Industry-wide Failure in Machine Learning Leadership," KDnuggets, January 2022



Make sure you have access to the data you need

AI solutions allow you to gain insights by leveraging data. But first, you need access to enough of the right data, and that data must be available, clean, and compliant with existing regulations.

Data scientists may build models using historical data only to discover that it may not be reflective of new data coming in, says Garg.

That data may be siloed and under the control of different parts of your organization. If the data includes personally identifiable information (PII), financial documents, or health records, it may be limited by privacy regulations or the European Union's data sovereignty restrictions. The data may not be timely enough to generate insights on the timescale needed for decision-making. Or it may simply be too expensive to clean and ingest the data.

"You need to figure out what data you realistically have access to in a production environment, within the timescale needed for driving business insights," adds Garg. "You may also need to build the cost of data capture and ingestion into your budget and your deployment timeline."

Collaborate with key stakeholders

In our culture, we tend to celebrate the lone genius, burning the midnight oil in the lab and emerging with a "eureka" moment. But the most effective AI solutions are built collaboratively. That's because many moving pieces must work together in addition to the model itself.

Data scientists need to work with their peers in IT and on the business side to understand existing business processes and tools, Garg says.

"It's one thing for a single data scientist to create a prototype or proof of concept working by themselves," she says. "But once you actually start to move things into production, a lot more people get involved, and predictions may not be useful if they're not incorporated into a larger decision-making process. There may also be regulatory requirements or internal best practices you need to comply with. When you're undertaking an AI project, it's critical to map out who the relevant stakeholders are and engage with them."

If the solution ultimately means tearing down existing systems and replacing them, Garg warns, you need to be confident that your AI solution will solve problems in a way that's better than how they've been addressed in the past.



Create a model that solves real problems for your business

Too often, AI models generate insights that don't ultimately have much impact on the success of the organization. Projects must show a tangible return on investment to move forward.

"A lot of AI projects don't offer enough value to your business," Garg says. "You need to ask, are you actually solving the problem that needs to be solved? It's one thing to build a mathematical model that allows you to interpret data, and it's a very different thing to change the way a business makes decisions."

This means that even for the same data set, your AI solution might focus on very different outcomes. For example, consider building an AI solution using customer service data. Some organizations might say reducing churn is their primary goal. Others might say they want to improve customer service ratings or broaden their reach to underserved groups of people.

In many cases, it comes down to the metrics most used to define business value: cost and efficiency. For example, using AI to manage supply chains has been shown to cut logistics costs by 15%, inventory levels by 35%, and service levels by 65%.³ AI-enabled document processing has allowed mortgage lenders to close loans 12 days faster and reduce the length of their know-your-customer verification procedures from two days to just five minutes.⁴

How HPE fills gaps in AI expertise

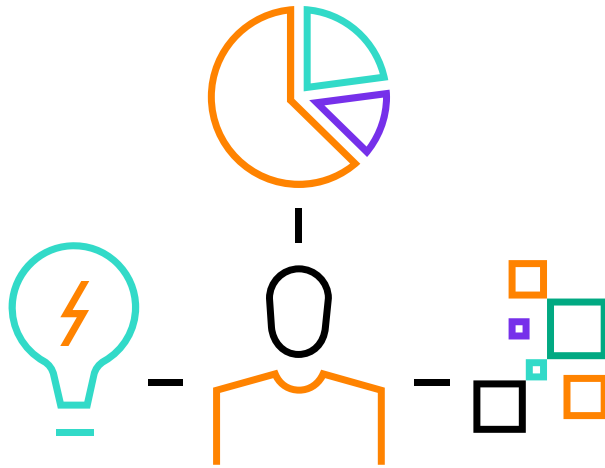
Even if you have a mature AI development team, you can use help working with IT to deploy their models to your broader organization.

HPE can provide tools and technologies that help you overcome some of your IT challenges, such as moving from a prototype built by a single data scientist to a more sophisticated production deployment that can be integrated with other, legacy capabilities, Garg says. At the same time, HPE offers professional services that work with you at different stages of maturity to help you build your AI strategies and incorporate them into existing business processes.

"Technology is usually the easy part," Garg says. "Getting buy-in from the people involved in these processes can be a bigger and more difficult barrier to overcome."

³ "Succeeding in the AI supply-chain revolution," McKinsey, April 2021

⁴ "Unleashing the future of banking with AI," HPE, 2022



Remember: AI is a means, not an end

AI is not the end goal but a facilitator for reaching end goals, notes Garg. What a data scientist thinks is cool may not be what a business leader finds useful. It takes data scientists working closely with business subject matter experts to identify areas where AI can provide the most benefit.

“A lot of businesses start out with the idea that ‘we need to do something with AI,’” she says. “It’s very challenging to have a successful outcome if that’s your starting place. A better way to start is, ‘we need to solve this specific problem, and maybe AI can help.’”

Learn more at

[HPE.com/ai](https://hpe.com/ai)

Visit **HPE GreenLake**

 **Chat now (sales)**


**Hewlett Packard
Enterprise**

© Copyright 2023 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

a50008459ENW