

# 7 Steps to Get ROI from Practical AI



As prototypes and projects catch fire, fewer than half of those prototypes made it into production. Even fewer have measurable ROI. Thankfully, it seems we've crested many early learning curves. From friction between teams and brittle IT infrastructures to elusive data availability and overambitious use cases, it's more clear where the wins lie. If machine learning round one was all about accuracy, machine learning take two is all about *applicability*.

That is "**practical AI**"—a measured approach to AI that's become a priority for nearly half of CIOs in the coming year. To make this endeavor a core competency, we'll need good habits and the right foundation with these 7 steps.

## 1. Identify the business problem or the inefficiency you want to solve.

While there are thousands of use cases for practical AI, not all will knock it out of the park in terms of ROI. Why? Sometimes a project requires a data set that's so unwieldy and complex that AI becomes *impractical* as a solution. Every AI project must have a clear purpose or a "why." You should be able to outline that purpose, whether it's to:

- Create efficiency by streamlining workflows or processes
- Speed up processes and reduce time to market

- Scale capabilities or projects
- Eliminate certain tasks
- Reduce risk or improve accuracy

One of the most common “whys” for automation is removing low-value tasks from workflows so workers can focus on more strategic work. In data management, for example, [DBAs can take tedious tasks like tooling off their plates with AI](#) and put their critical skills toward more valuable work. Another example is tackling [the complexity of unstructured data](#), such as processing images and video. With advanced neural networks, analyzing unstructured data is a prime, practical use case for AI.

## 2. Determine what to automate and how.

At AI’s hype peak, organizations were more likely to throw a ton of AI proofs of concept at the wall to see which stuck. These days, we’re more aware of its practical opportunities.

In turning your “why” into your “what,” it’s important to also understand where AI excels. To do this, you’ll want to break processes, workflows, or tasks down into their smallest components. Assign the tasks that fit with the AI application and reframe the remaining ones into streamlined, manual workflows.

The data scientists who create or implement the models can determine how AI and machine learning are best applied, how data is processed, manipulated, extracted, filtered; and then, apply third-party services and deep learning frameworks to enhance applications. While this can be pretty straightforward, you’ll want to make sure they have the infrastructure runway they need to support whichever tools they choose.

## 3. Get your data infrastructure in order.

You have buy-in from the C-suite and the budget and teams lined up. But what about your infrastructure?

The underlying infrastructure get AI projects into production has to be able to handle massive amounts of

data. Without it, teams may not be able to infuse these apps with the quantity or quality of data they need to create ROI. Specifically, **data storage will need to be able to support the simplification and consolidation of unstructured data.** [Pure Storage® FlashBlade® is a unified fast file and object \(UFFO\)](#) storage platform designed to meet the demands of unstructured data:

- **Consolidation of unstructured data.** When you're leveraging text and images for analysis and AI-powered applications, such as surfacing related products on ecommerce channels, you need storage that can seamlessly handle this often unwieldy unstructured data.
- **Performance demands.** Performance is critical across the entire AI and analytics spectrum. ML and software development workflows require fast storage. Throughput-hungry applications demand more, and the massively parallel architecture of FlashBlade is perfectly suited to address these applications' needs.
- **Data reuse.** The analytics-AI continuum creates a need to reuse data across applications. FlashBlade can serve as a central repository in these cases, rather than copying data to all potential applications.

Enterprises can get storage and compute in one system, engineered specifically for AI projects. Solutions such as AIRI® and [FlashStack® for AI](#) offer high-performance, architecturally optimized solutions that can harmoniously run within existing data centers. Think of it as one universal building block for an AI data center that manages any workload on any node, any time.

## 4. Get the team roles and skillsets right.

It might seem like “hiring data scientists” is the key step here, but the talent to run AI initiatives is only a fraction of the equation to success. Yes, you'll need the right people—but also the right *mix* of people.

Organizations with the highest effectiveness in making AI an integral part of business strategy use mixed-role AI teams for all AI initiatives. These organizations strongly believe that aligning AI to business initiatives is a way to deliver value. Both the diversity of the team and how their perspectives and insights are leveraged for the project are key.

## 5. Avoid “shadow IT” with visibility and accountability from the start.

What is the right foundation to enable AI success—especially at scale? It's one that doesn't foster shadow IT.

Shadow IT describes the entrepreneurial teams who “forge ahead” with a project. It also happens without much consultation with the broader IT enterprise. It's understandable—IT isn't always in data science's wheelhouse, and vice versa. They haven't always had the GPU compute or infrastructure that AI needs or the workflows that help them be really productive. These have often eluded IT, so they built out what they needed along the way, DIY-style.

The problem with this, especially in terms of ROI, is that it's not a scalable foundation. Executives gunning to scale AI across their organizations won't be able to work with a patchwork of “innovation silos.” Success must be easy to share, replicate, and repeat with optimized, connected technologies.

**[Read this article to learn how the DevOps discipline can be applied to data science for more success with innovative projects like AI.](#)**

## 6. Nail down metrics and measurement.

*“Organizations that measure financial or risk impact for AI projects are more likely to be successful than those that don’t.” -The CIO’s Guide to Artificial Intelligence*

AI works best when it can learn from itself to improve—without major consequences or lost revenue. How will you quantify the ROI? Your “why” will dictate the KPI here: Is it time saved, mistakes avoided, or additional revenue? Staying on top of measuring and reporting will help with continuous improvement.

But it can also multiply your success by revealing new opportunities. Gartner notes, “Embracing metrics enables organizations to showcase how AI can be used across the enterprise by highlighting its benefits and risks in certain areas. For example, the ability to analyze videos or images might start in the security realm, but with some maturity could be used to analyze organizations’ brand presence or understand how customers react to products.”

## 7. Be patient!

It takes many organizations on average 8.6 months to get from prototype to production—with no guarantees they’ll even make it into production. In fact, fewer than half make it into production. Set realistic timelines and following these steps can help ensure you’re putting your best foot forward, but keep in mind, there are no shortcuts in real success with AI.

## The Key: Tackle Unstructured Data

Massive amounts of unstructured data will be the backbone to success with practical AI, but storage solutions will need to keep up. UFFO storage can be the smart foundation of AI applications, which need to be:

- Distributed and easily scalable across your entire infrastructure
- Orchestrated through APIs rather than IT staff
- Developed to process and use data in real-time

Pure Storage offers the industry’s leading unified fast file and object storage platform with FlashBlade, and our AIRI infrastructure solution was recently named the “Best AI Solution for Big Data” in the 2021 Artificial Intelligence Breakthrough Awards. [Explore AIRI](#) or [take a FlashBlade test drive today](#).

1. <https://www.gartner.com/smarterwithgartner/2-megatrends-dominate-the-gartner-hype-cycle-for-artificial-intelligence-2020/>
2. <https://www.gartner.com/smarterwithgartner/5-habits-of-organizations-with-successful-ai/>
3. <https://www.gartner.com/smarterwithgartner/5-habits-of-organizations-with-successful-ai/>
4. <https://www.gartner.com/en/documents/3987202/survey-analysis-moving-ai-projects-from-prototype-to-pro>