

6 KEY FEATURES TO LOOK FOR WHEN BUILDING AN AI FACTORY

Every AI factory solution is different, with some more suitable for your needs than others. Follow this checklist to make the most of your AI investment.

Much like a traditional factory that transforms raw materials into finished goods, an AI factory processes data to produce actionable intelligence. This is the promise of the modern AI factory — harnessing the potential of AI to create tangible benefits. By converting vast amounts of data into meaningful insights, an AI factory enables businesses to make informed decisions, optimize operations, and drive innovation.

Numerous technology providers are now offering AI factory products and services to their customers. However, it's important to realize that not all AI factories are the same.

Some AI factory offerings may be little more than a blueprint, a set of guidelines that the customer must follow on their own. Outstanding solutions — such as Hewlett Packard Enterprise's AI factory portfolio for enterprises, model-building enterprises, service providers, and sovereign entities — provide fully integrated infrastructure, software, a control plane, and services that guide organizations to value faster, without the burden of having to navigate all these components and fill in the gaps on their own.

With HPE Private Cloud AI, you get a completely turnkey platform on which you can experiment and iterate. Our AI factory at scale offerings are fully validated, composable solutions built to address your specific goals and challenges.

Regardless of which type of AI factory implementation is correct for you, it's essential to understand which features are critical. Here are six you should consider non-negotiable.

1. Ability to customize the solution to your specific needs

Every organization is different, so a one-size-fits-all approach to implementing an AI factory often leads to dissatisfaction. Your solution needs to consider the size and complexity of your proposed AI workloads, the intended phases of the AI lifecycle, the infrastructure you already have and what you propose to build, your overall comfort and experience level in using AI, and of course, the ultimate goal of your AI program. If your technology provider doesn't ask these questions in the early stages of your onboarding and work to customize its solution based on your answers, you may find yourself building an AI factory that doesn't serve your needs.

2. Ability to manage data and scale efficiently

Modern organizations have data scattered across their entire IT landscape, including the data center, the cloud, and edge locations. To boost its utility, your AI factory needs to access all this data and be continuously fed fresh data in real time. A high-quality AI factory solution does not only provide this level of data access but also help make clean data available to the AI environment in the right place and at the right time.

Scalability is another non-negotiable. Your AI factory at launch will almost certainly look much different from your AI factory three years from now. A well-designed AI factory is built and validated to scale from the start, avoiding common bottlenecks that can limit your growth potential.

3. Support for multitenancy

Very few AI environments are designed for a single tenant that runs a single workload at a time. As such, multitenancy is critical whether you're a service provider or an organization with complex AI goals and a panoply of AI workloads. Your AI factory solution should be designed with multitenancy in mind, providing isolated environments for multiple tenants and their workloads. This approach limits conflicts over resources and reduces the risk of inefficiencies that may impact the broader IT environment.

4. Highest levels of security and compliance

The need for rock-solid security remains unchanged in the AI era. In fact, it's more critical than ever, as data breaches that impact AI systems can be especially disastrous to both an organization's finances and its reputation. Organizations also face increased governmental scrutiny and a surge in new regulations surrounding the use of AI models and their data, further increasing the need for a secure AI platform. Will your AI factory be compliant with today's regulations — and the ones on the way? Your technology provider should be prepared to answer that question.

5. Availability of sovereign AI solutions

Governments and public institutions face unique challenges when building AI factories, as they compete on a broader scale, sometimes globally, and must also respond to citizens' needs. A primary goal of many sovereign entities and their AI initiatives is to prohibit third-party access (such as that from other nations) to their AI environment and protect against the risk of foreign entities interfering with domestic access to AI and their data. A sovereign AI factory solution addresses these concerns, safeguarding national interests and sensitive data while providing seamless, flexible access to authorized users within the country.

6. Support from qualified experts every step of the way

An AI factory solution that drops you into the pool without a lifeguard may be worse than having no AI solution at all. Any worthwhile AI factory comes with expert-led guidance at the outset, along with support during and after implementation, providing experienced help at every stage of the AI lifecycle. Your AI strategy should be tailored to align with your business objectives, prioritizing the most effective AI use cases to achieve your desired outcomes. Your support team should also advise you on whether AI is the correct solution for your business requirements at all.

HPE is your expert guide on the AI journey

The pace of change in the world of AI is not slowing down, and organizations that are still sitting on the sidelines are falling further behind every day. HPE's AI solutions can supercharge the creation, adoption, and management of your AI factory. Our comprehensive suite of AI factory offerings covers the entire lifecycle from development to deployment and beyond — and can get you started down the road to success today.

Learn more at

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