

Whitepaper

AI Test Drive helps data scientists validate business cases for investment



Fujitsu has created a game-changing artificial intelligence (AI) test drive opportunity that will empower data scientists to rapidly accelerate their research and gain a head start in the global race to AI adoption.

Working with a broad eco-system, including industry-leading technology partners Intel, SUSE, NetApp, and Juniper, Fujitsu has created an AI test drive that will give data scientists direct access to the technology they need to validate their theories and models and help them build a strong business case for investment.

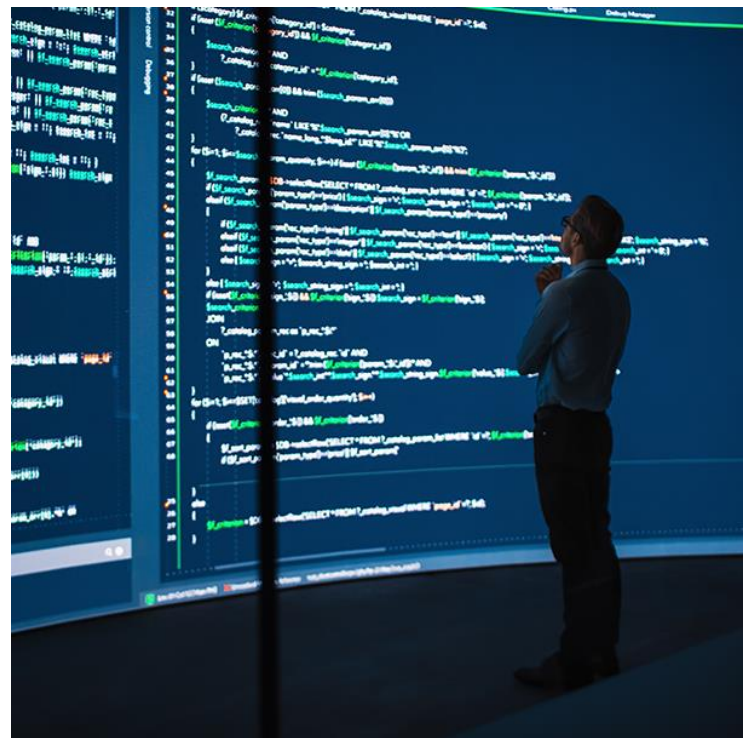
Moving AI-powered research past the tipping point

Building that business case is the biggest hurdle for data scientists looking to leverage AI. The Fujitsu AI test drive can largely overcome this by providing state-of-the-art AI infrastructure at no cost to help data scientists to understand their needs, validate and benchmark their data, and select the right AI infrastructure. This will put data scientists at the front of the pack when it comes to accelerating the use of AI to solve global and business challenges.

The relatively high cost of AI infrastructure has held many data scientists back from realizing the full potential of AI. By partnering with the world's best and most advanced AI technology providers, Fujitsu is leading the way in unleashing the power of AI in their projects.

Many data scientists stand on the precipice of using AI to make dramatic impacts on their industry and even the world at large. The only thing holding them back is access to the right technology.

By using Fujitsu's AI test drive capabilities to remove the guesswork and create an undeniable argument for investment, data scientists can realize the power of AI and drive their research further, faster.



Barriers to leveraging AI

The typical infrastructure required to run AI projects is specialized and costly, making it essential to build a strong business case so that decision-makers are both confident and comfortable with the significant investment required.

In addition, the cost of running AI workloads in the public cloud is high, and the physical distance between the datasets being used and the analytics platform can prevent projects from operating efficiently.

There are four key barriers to leveraging AI:

Compute power

Most organizations don't have the resources to procure their own AI infrastructure, putting them at a disadvantage when it comes to running AI projects. To secure buy-in from stakeholders to invest in this compute power requires a watertight business case that clearly demonstrates the potential return on investment. However, developing this business case can be challenging without access to the compute power needed to accurately determine the project's requirements.

Lack of knowledge

Due to the emerging nature of AI, data scientists are hesitant when trying to determine the type and size of infrastructure they need, where to host it, what to run on that infrastructure, or simply where to start. As the needs associated with AI become more complex, it becomes harder to answer these questions without having specialized, experience-based knowledge.

Proximity

Data comes from a broad range of sources so, to access that data effectively, the AI infrastructure needs to be well-connected with high-speed, secure access to the cloud and data brokers. Most legacy or existing cloud infrastructure cannot scale effectively to meet AI demands.

Cost and complexity

Many organizations opt to run their AI workload in the public cloud, believing it will save on costs. However, this option is significantly more expensive than other options available. The more data that needs to be trained, the more money the organization will need to invest. This can become cost-prohibitive very quickly, and performance can be impacted.

On-premises AI infrastructure is highly complex yet comparatively cost-effective and secure. The organization will need to host its own infrastructure, which is power hungry and requires efficient cooling systems. It also increases the possibility of the organization needing to enhance or rebuild its data center, thus there may be a need to change the infrastructure and invest in skilled resources.

Working with a third-party data center can often be more advantageous, providing the ideal balance of cost-effectiveness, performance, reliability, and skilled resources. However, not every data center provider can offer the kind of compute power and infrastructure required by AI projects, so it's important to select one that is AI-ready.

AI is all about GPUs, or is it?

Graphics processing technology has evolved to deliver unique benefits in the world of computing. Designed for parallel processing, the GPU (graphic processing unit) is used in a wide range of applications, including graphics and video rendering. Although they're best known for their capabilities in gaming, GPUs are becoming more popular for use in creative production and AI.

Over time, also CPUs (central processing unit) and the software libraries that run on them have evolved to become much more capable for deep learning tasks. For example, through extensive software optimizations and the addition of dedicated AI hardware, such as Intel® Deep Learning Boost (Intel® DL Boost) in the latest Intel® Xeon® Scalable processors, CPU-based systems have enjoyed improvements in deep learning performance.



For many applications, such as high-definition-, 3D-, and non-image-based deep learning on language, text, and time-series data, CPUs shine. CPUs can support much larger memory capacities than even the best GPUs can today for complex models or deep learning applications (e.g., 2D image detection).

Beside the obvious cost advantage, there are other reasons to challenge the thinking AI = GPU. For example, CPU based systems are generally simpler and more robust, e.g., for the implementation in edge environments. GPUs have a higher power consumption and cooling requirements while CPUs are available in various proven standard systems for easy deployed in the data center and on the edge.

Additionally, the commitment of Intel for developing on the oneAPI open standard helps ensure maximum code reuse across stacks and architectures and tools like OpenVINO simplify deep learning inference deployment for hundreds of pre-trained models for CPU based systems. The development of AI solutions on the AI Test Drive,

such as the Fujitsu Sentiment Analyzer, show how maintaining a common workflow reduces time and cost for more experimentation and better accuracy. This is how to scale AI everywhere - partnering with a broad, open software ecosystem.

Today, CPUs let you build the AI you want, where you want it, on the x86 architecture you know. Let us test your solution together on the AI Test Drive to find out what fits your individual needs.



Take an AI Test Drive at zero cost!

You are looking for an artificial intelligent and IT-supported solution to automate processes in your organization? Simply bring your use case and benchmark against the latest IT platforms or try out one of the pre-installed use cases.

- Test different hardware options to determine which platform is right for your AI solution.
- Uncover dependencies and understand interoperability of components.
- Close skill gaps and discuss your optimal AI platform setup with our experts.
- Get a head-start on successful AI adoption with the AI Test Drive by Fujitsu

Don't miss your change to get a head-start on AI adoption – Register now!

www.fujitsu.com/ai-test-drive

Contact

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2022-10-25

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