AI Test Drive helps data scientists validate business cases for investment

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Moving AI-powered research past the tipping point

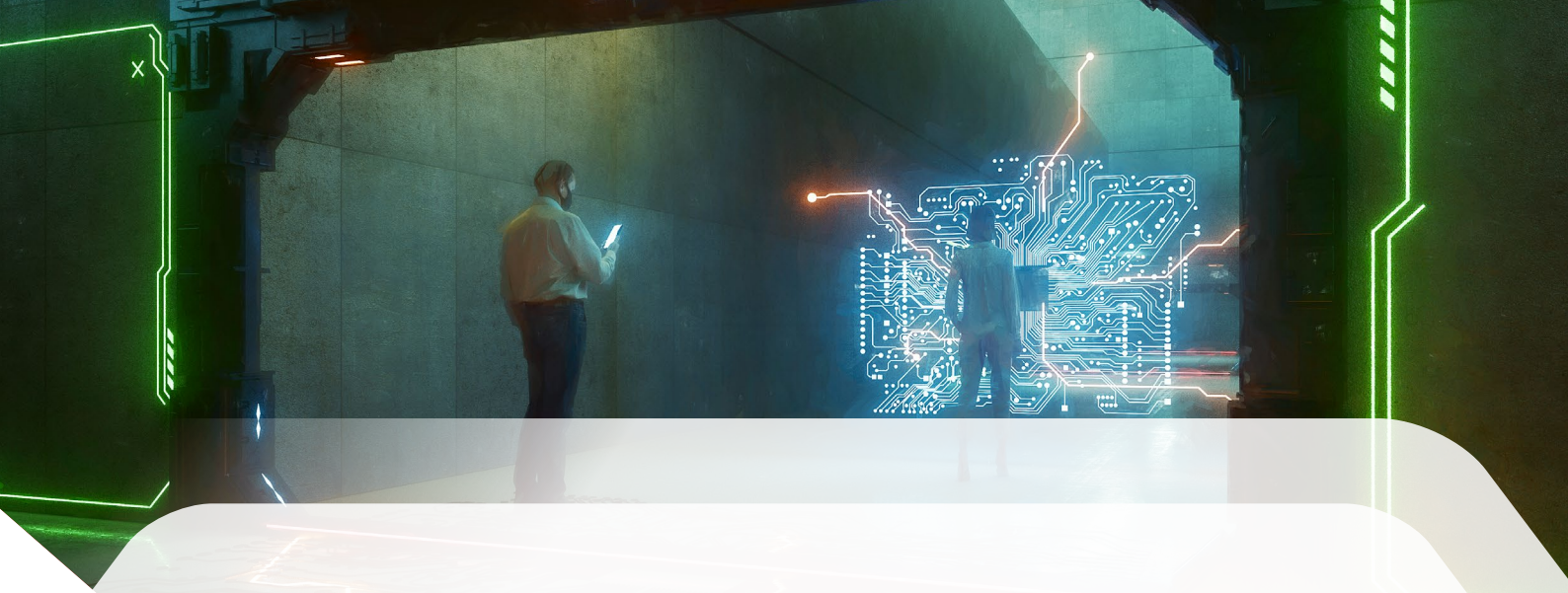
Fujitsu has created a game-changing artificial intelligence (AI) test drive opportunity that will empower data scientists to rapidly accelerate their research and gain a head start in the global race to AI adoption. Working with industry-leading partners NVIDIA, NetApp, and Core Scientific, Fujitsu has 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.

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 realising 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 realise the power of AI and drive their research further, faster.



Barriers to leveraging AI

The typical infrastructure required to run AI projects is specialised 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:

1. Compute power

Most organisations 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.

2. 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 specialised, experience-based knowledge.

3. 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.

4. Cost and complexity

Many organisations 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 organisation 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 organisation will need to host its own infrastructure, which is power hungry and requires efficient cooling systems. It also increases the possibility of the organisation needing to enhance or rebuild its data centre, thus there may be a need to change the infrastructure and invest in skilled resources.

Working with a third-party data centre can often be more advantageous, providing the ideal balance of cost-effectiveness, performance, reliability, and skilled resources. However, not every data centre 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.

Test driving AI infrastructure with Fujitsu: AI-as-a-Service

Just as a buyer would prefer to test drive a car before making a purchase, test driving AI infrastructure before committing to it can help ensure the organisation makes the right choice. A test drive lets data scientists access the latest, purpose-built AI infrastructure for their projects.

Fujitsu has partnered with NVIDIA, NetApp, and Core Scientific to offer specialised AI test drive facilities that empowers data scientists to leverage AI-as-a-Service. As the only data centre operator in Oceania to offer this service, Fujitsu brings together the industry-leading AI hardware technologies from NVIDIA and NetApp and the best-in-class cloud software technology from Core Scientific.

Data scientists can run their AI projects for up to two weeks at zero cost using Fujitsu's purpose-built, accredited data centres onshore. With full control over the platform and using their own data for curation, ingestion, and cleaning, the test drive delivers a clear picture of how to make AI infrastructure best work for their needs.

Using the most powerful AI infrastructure in the world, data scientists and domain experts can trial their algorithms. This approach simplifies the common challenges and overcomes the barriers to running successful AI projects. It lets organisations determine where to run their AI infrastructure and qualify the cost of investment in AI.

Undertaking Fujitsu's AI test drive will give organisations faster time to value for their AI projects. It brings all the hardware and software together in one place to give organisations a simplified, fast, and secure way of accessing AI and validating theories and models to gain a head start in the global race to AI adoption.

Industry-leading AI technology stack

Fujitsu offers two different test drive options that data scientists can use before they get to the prototype stage to help them beat the odds and get their projects into operation. These are:

1. Validation (NVIDIA DGX-1)

Data scientists can confirm and validate their code/AI models. This is a longer test drive period that can last up to 14 days, letting data scientists tweak and change their codes to maximise the system's power. Since many data scientists come from different AI training environments, this option also lets them get acquainted with the Fujitsu and NVIDIA DGX environment.

2. Benchmarking (NVIDIA DGX A100)

This option allows data scientists to fully utilise and benchmark their AI training models on the latest and most powerful system. It will be mainly occupied by data scientists who have validated their codes in some way prior to the test drive to maximise their usage of the A100.

DGX A100 combines the power of eight NVIDIA Tensor Core A100 GPUs with six NVIDIA NVSwitch network interconnects, two 64-core AMD CPUs, and 1TB of system memory.

NetApp ONTAP AI with DXG A100 systems combines industry-leading compute capabilities with the latest NVIDIA Mellanox HDR 200Gb InfiniBand and 200GbE network fabrics and NetApp AFF storage for high-performance I/O and advanced data management. ONTAP AI solutions support AI workloads at scale, including analytics, training, and inference.

NetApp has extensively validated the performance of these systems using multiple benchmarks to stress test various NVIDIA and NetApp components. In addition, a number of real-world deep-learning benchmarks were run to validate system performance and scaling.[1]

1. https://blog.netapp.com/nvidia-gtc-accelerate-enterprise-ai-adoption

Why Fujitsu

Fujitsu is pioneering this AI test drive offering for data scientists. Fujitsu is highly advanced in this area, having already certified three out of six hyperscale data centres to run the industry-leading NVIDIA and NetApp architecture. Fujitsu deploys NVIDIA's DGX AI compute infrastructure with the world's most advanced accelerator. Fujitsu is one of only 19 NVIDIA-validated data centre operators globally with the capabilities to support the substantial compute, storage, networking, and facility requirements created by AI applications. Fujitsu was chosen to participate in the NVIDIA DGX-Ready Data Centre program by NVIDIA because of its vast data centre experience, high security standards and robustness.

Together with NVIDIA, NetApp, and Core Scientific, Fujitsu's AI test drive option is a fully integrated AI-as-a-Service platform. It lets organisations work with an industry-leading AI stack that includes all the elements needed to run major AI software frameworks. Importantly, it provides a data centre platform that is highly interconnected, providing high-speed and secure connection to IT systems and data sources spread across public clouds, private data centres, and edge locations.

According to Ritu Jyoti, Program Vice President, Artificial Intelligence Research, Global AI Research Lead, IDC, "AI customers will be best served by integrated solutions or managed services that pull together best-of-breed technologies for the end-to-end stack, thereby eliminating integration challenges and simplifying consumption."[2]

Next steps

Whether you are in the validating or benchmarking phase of your AI journey, get in touch for the unique opportunity to run your AI projects on the latest purpose-built AI infrastructure. Gain full control and access to a pre-configured NVIDIA DGX POD, powered by NetApp ONTAP AI and Core Scientific Plexus software solution for the trial period.

Kickstart your AI journey with Fujitsu today

Contact the team

2. https://blog.netapp.com/netapp-nvidia-working-together-to-drive-value-from-ai