

Smart Retail



Deliver **differentiated in-store experiences that delight customers** with frictionless services that leverage your supply chain from end-to-end and in real time



Accelerate AI through GPU-powered Azure solutions and deliver real-time speed, predictability, resilience, & sustainability



Build & operationalize AI models

- Integrated toolchain for all skill levels
- Support for scaling MLOps solutions
- Enterprise-grade capabilities anywhere
- Responsible AI



Performant & energy efficient solutions anywhere

- Scale-up accelerators for inferencing & moderate training needs
- Scale-up-and-out networks of interconnected accelerators for data and model-parallel training needs



Empowering multi-discipline collaboration

- Application (AI) and IT Infrastructure (HPC) specialists

GPUs for Deep Learning

Capabilities:

- ✓ Heavily parallelized environments
- ✓ Superior choices for repeatable tasks to scale e.g., model training & inferencing tasks
- ✓ Excellent price-performance benefits
- ✓ Energy efficient

Use Cases:

- ✓ Real time Inferencing
- ✓ Batch Inference
- ✓ Basic Training
- ✓ Midrange Training
- ✓ Data Parallel Training
- ✓ Model Parallel Training

Use Cases for Smart Retail



Demand Forecasting

Retailers want to increase the agility of their supply chains with faster, more reliable forecasting and optimize inventory management to ensure product readiness for same-day orders.

Fast Facts

33%

Reduction in inventory through use of a demand-driven supply chain

73%

Retailers believe AI and ML can add significant value to their demand forecasting

- Deliver 50X performance improvements for classical data analytics and AI processes at scale with an AI-first infrastructure
- Leveraging NVIDIA RAPIDS™ & GPUs, retailers can accelerate training of their AI algorithms up to 20X – meaning they can use more data and process it faster with greater accuracy, allowing them to react in real time to shopper trends and realize inventory cost savings at scale
- Reduce the total cost of ownership (TCO) for large data science operations
- Increase ROI for forecasting, resulting in cost-savings from reduced out-of-stock and poorly placed inventory

Benefits

Connected Store

Autonomous checkout locations are expected to increase 4X annually in the next three years. With this, retailers can provide customers with frictionless and faster shopping experiences, while increasing revenue and margins.

Benefits

- Deliver a better and faster customer checkout experience, reduce queue wait time
- Increase revenue and margins
- Protect assets — the loss of inventory due to theft, shoplifting, ticket switching at self-checkout lanes, etc., costs retailers \$62 billion annually (National Retail Federation)

Fast Facts

63%

Stock shortages due to fluctuating demand and regulations from the pandemic

87%

Consumers prefer touchless or robust self-checkout options during COVID-19

Impacting retailer's bottom line:

Accelerate industry innovation with the advantage of enterprise customers + solution partners

Integrated & optimized platform of hardware and software for AI apps, from edge to cloud

Safe, secure, & agile operations with predictive maintenance to detect anomalies and speed up time-to-insights

Inventory-optimized supply chains to increase operational efficiency and optimize performance

Achieve **higher speed and accuracy with better AI performance** to fuel increased revenues and reduce time to market

Ensured product quality with minimized waste, cost, & downtime using Deep Learning models for increased performance and quality of services

90%

Customers say purchase decisions are influenced by online reviews

95%

Shoppers state they use a digital device prior to or during their shopping trip for product related research

Microsoft & NVIDIA have combined their deep industry expertise & experience via a single, integrated platform

Next Steps

Contact your local Microsoft representative to get started...

