



## The Right Solution for a New Era in Retailing

In addition to supporting its automated retail infrastructure, DDN helped a retail customer optimize their in-store IT framework system, solving several bottlenecks and delivering an exponential increase in training and inference yield from the underlying DL application.

XXII, a leading provider of real-time video analysis solutions, partners with DDN to deliver a seamless, automated retail experience. Using its proprietary computer vision algorithms, the XXII and DDN-backed solution allows customers to shop in stores without any friction and without having to wait in line.

A fully autonomous check-out solutions supplier partners with DDN to seamlessly deliver continuous data acquisition for multiple cameras, providing real-time analysis of data, offering low-latency responses, and effortless management of complex deep-learning training algorithms.

# Automated Retail

The consumer shopping experience is undergoing a radical transformation as technologies like automation and integration become more cost-effective and accessible. Soon, standing in a checkout line will be something found in history books. The shift to frictionless retail incorporates autonomous checkout and real-time analytics that promises to improve the overall shopping experience, from seamless, in-store interactions to enabling real-time customer service.

The next-generation retail technology, using high-definition, in-store cameras, advanced computer vision, and sensors and devices will generate valuable data for retailers to gain tangible insights on their consumers. Artificial Intelligence (AI), machine learning (ML) and deep learning (DL) applications have the potential to meaningfully impact the retail industry.

All this requires an IT infrastructure that can support the ingest, processing and delivery of large datasets and ensure the saturation of the GPUs used by retail DL applications. DDN designs its systems with physical space and power limitations, remote management capability, and autonomy of the system in mind.

### Optimized for AI Application Demands

DDN solutions accelerate machine learning, simplify massive data set analysis, and support retail analytics for real-time recognition of consumer shopping baskets. DDN delivers cloud and on-premise solutions that ingest live feeds from cameras in real-time and provides built-in scalability to handle the collection of additional daily datasets over time.

### Speed and Efficiency

DDN is one of the leaders in AI-oriented calculators for inference purposes, and provide high storage capacities and high-volume video management. DDN combines an all-flash layer, with integrated controls for automatic staging of the day's freshly acquired data set, with a hard disk layer for longer-term economical storage. GPUs get the fastest and most efficient access possible to the daily capture data to achieve the highest productivity.

### Proven Expertise and Technologies

What sets DDN apart is our comprehensive knowledge and expertise, not just in storage but also in the entire architecture. With our deep experience and proven technologies in AI, HPC, and large-scale computing, DDN delivers analytics and machine learning results with efficiency and acceleration never achieved before. Our engineering and support teams are committed to solving the most complex challenges and ready to push the boundaries of the retail industry.