DELLTechnologies

Solution Brief

Dell Validated Design for Retail Edge with Deep North

Simplified edge solutions for the intelligent store

Key use cases for Intelligent Video Analytics with retail edge solutions:

Consumer Behavior Analysis: Tracking, measuring, and acting on insights to improve store operations.

Associate Analysis: Measure associate performance in real time to improve customer experience with services times, checkout times, and staff productivity

Store Operations Metrics: Use cameras to alert out-of-stock items, optimize store layout, and assist pick-up experience.

Checkout management and accuracy: Match computer-vision based insights with POS info to reduce shrink and asset loss in real-time. Alert associates to open lanes to reduce queues.

Compliance: Receive real-time alerts on spills, health and safety violations, planogram compliance, and other compliance issues.

To accelerate intelligent retail, you must simplify your edge

For the past several decades, eCommerce has consistently ta en mar et share from mar et share from the traditional bric -and-mortar retailers hile the growth of the internet played a role, this trend could best be e plained by data nline retailers have significant amounts of data on their customers from the terms they search for, the items sitting in their carts, their past purchase history, and even demographic information from on all their customers s Tesco e ecutive Clive umby said in , Data is the new oil This oil has allowed eCommerce giants to supercharge their growth through better mar eting, - testing, and other optimi ations to their store e perience ric -and-mortar have not had access to that same level of data until today
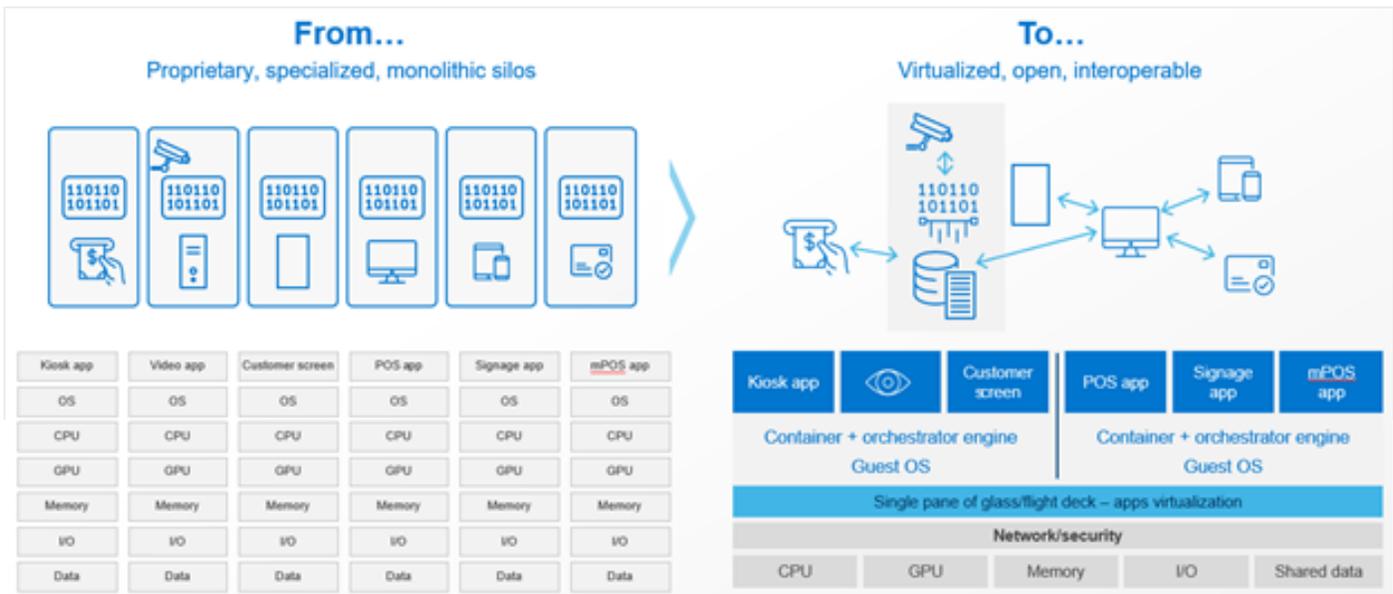
The Dell alidated Designs for Retail dge with Deep orth is a solution that provides the first entry point into edge computer vision capabilities and provides them the data of what customers and associates are doing inside their stores tili ing e isting store cameras, retailers can see what products customers interact with, where in the store they travel, and use this in real-time to drive insights and action Retailers could use this system to inform associates to open up chec out lanes proactively when the store is busy, or address spills out-of-stoc items uic ly Dell alidated Designs for Retail dge with Deep orth provides the first, foundational step for computer vision based edge technologies and will help retailers level the playing field of data with their eCommerce counterparts.

Creating smarter retail services

To bring back customers and build loyalty, retailers must invest in smart retail services to transform the in-store experience. By leveraging new technologies at the edge such as Deep North, retailers can create a shopper-centric approach and fulfill the omni channel strategy at the heart of intelligent retail. This solution can help prove out the value of edge technologies for retailers, and help unlock new use cases in loss prevention, automated delivery and pick-up, and even fully-autonomous stores.

Consolidate operations across applications and locations

While the edge unlocked new possibilities for retailers, it often comes at the cost of sprawl in hardware/software that IT must support. By consolidating applications such as Deep North onto a common architecture with VMware Edge Compute Stack, IT and OT can work together to achieve centralized standardization of applications and infrastructure, while providing local control to operators. This allows resources to more easily scale as workloads increase, and empowers IT with single-pane-of-glass of their edge compute fabric, allowing them to easily manage, orchestrate, and automate key app functions across the edge.

Example of retail edge consolidation

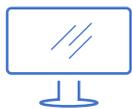## Leverage Intrinsic security at the edge

The edge also brings an increase attack surface for hackers, and smart devices, such as cameras, are even more sensitive. We worked closely with Deep North to ensure this software fully complies with all major privacy regulations and in compliance with our own private concerns. In addition to our growing ecosystem of security partners, Dell offers unique features to verify supply chain integrity, ensuring the right products arrive at your store untampered with, and simplified setup and professional services makes deployment easy. By packaging and pre-validating this edge solution, we simplify the path to intelligent retail by embracing security throughout the stack.

Proven Technologies to win in the intelligent store

The Dell Validated Design for Retail Edge with VMware is a combined solution architecture, built with VMware Edge Compute Stack and Dell EMC hyper-converged platforms – spanning from the fully curated experience of Dell EMC VxRail to the customer-managed VMware vSAN Ready Node built on Dell PowerEdge Servers. The Dell portfolio includes several options that are short-depth, ruggedized, or tower based. This solution delivers a cost-effective, simplified, and flexible architecture that ensures faster deployment of new IT services for customers in the retail industry.

Partnering with Dell Technologies

At Dell Technologies, we believe in providing you with the proven, validated solutions designed to provide you the digital transformation roadmap for your retail future. Our solutions portfolio and retail expertise helps you reduce the risk, cost, and complexity of designing and deploying new applications by leveraging comprehensive solutions that are aligned to your specific business requirements. Dell Technologies can help guide you through your digital transformation journey, providing you with the right edge solutions equipped to deliver significant improvements in efficiency, while enabling your business to remain agile and innovate.

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