Driving Retail Success: The Dynamic Role of Technology in the Industry
Introduction

In the retail environment, every tick of the clock can lead to a sale or not. In this rapidly evolving in-store (brick-and-mortar) or online marketplace, the power of dependable computing from central data centers to edge locations becomes one. At Dell Technologies, we envision a future where cutting-edge data center and edge computing intersect with evolving customer shopping habits, opening doors to new opportunities and challenges that will shape the success stories for today’s retailers.

In today’s rapidly growing and changing retail industry, staying ahead of the competition requires innovation, efficiency, and adaptability. NRF forecasts that retail sales during 2023 will grow between 4% and 6% over 2022 to between $5.13 trillion and $5.23 trillion. Last year’s annual retail sales grew 7% over 2021 and totaled $4.9 trillion. This growth rate is above the pre-pandemic, average annual retail sales growth of 3.6%.

Primary Obstacles for Retailers:

- Enticing customers to come back into physical stores
- Improving onsite operations and lower operational costs

Consider technology as a key ingredient to addressing these two obstacles. Marketing campaigns that entice customers to return may start with real-time analysis on data collected from customer purchase behavior. For in-store operations, software applications may be combined to effectively manage everything from HVAC controls to restocking shelves.

Winning the hearts and minds of customers

Next level personalization is critical to enticing any customer back into a store. It is a crucial part of enhancing any customer journey. Technology enables retailers to hyper-personalize interactions through data analysis, artificial intelligence (AI) algorithms, and machine learning (ML). Studies show that 80% of shoppers are more likely to make a purchase when brands offer personalized experiences. By leveraging customer data, retailers can provide tailored recommendations, personalized offers, and customized experiences which will influence deeper customer engagements and loyalty. With these offers and smartly-priced basket sizes, sell-through rates and overall sales performance will improve.

Covid 19 pushed online purchasing past historical heights. From 2020 to 2023 online purchases grew 8% to 39% with a spike in 2021 to 55% of total sales. However impulse buys can be a large part of higher margin sales, so luring customers back into brick-and-mortar locations is key. As a result, retailers have moved to omnichannel retailing, where their physical and digital channels are seamlessly integrated to deliver a cohesive customer experience and more buy-online pick-up in-store (BOPIS) orders. To be sure store shelves stay full while fulfilling more BOPIS orders, retailers can leverage inventory management systems that provide real-time visibility across all channels. By ensuring accurate stock availability, retailers can efficiently fulfill customer orders, reducing wait times and enhancing customer satisfaction. Retailers leveraging technology to fulfill more BOPIS orders have seen a 44% increase in annual digital sales.
Improving operations and lowering costs

In 2021, the NRF found that retail shrinkage led to $94.5 billion in losses. Technology supporting the latest computer vision applications may be an option to address this challenge. These intensive applications may require more onsite compute, including GPUs for acceleration, requirements tailor-made for PowerEdge XR servers.

To efficiently restock inventory, consider automated inventory management systems. They ensure smooth communication between stores and suppliers, reduce human errors, and speed up ordering. Dynamic resource allocation helps meet high customer demands during busy seasons while staying cost-effective in slower periods. For predicting stock needs, AI-based systems may be an option. They use past customer data to prevent overstocking, thereby cutting down on discounted sales and waste. PowerEdge servers in a hybrid cloud...
setup are ideal for running these AI tools and integrate well with electronic data systems, online portals, and automatic restocking systems.

To boost company profits, it's important for retailers to focus on the value of their products rather than just competing on price. By using augmented reality (AR) and virtual reality (VR), retailers can offer engaging experiences. These experiences can show off product features, demonstrate how to use them, and emphasize what makes them special. When used right, AR and VR can double sales conversion rates and cut returns by 40%\(^{12}\).

**Why wait, update technology today**

Retailers can benefit greatly from technology, but it's vital to update the existing IT systems to ensure they are modern, reliable, and resilient. Investments should be made in scalable, cloud-compatible computing, and strong cybersecurity to create a firm tech foundation. One good example would be to install on-site edge computing solutions for each store to process real-time data from sources like sensors, cameras, and point-of-sale systems.

Using a centralized system for managing your technology helps in deploying uniform hardware and software solutions. Automated tools in systems management ensure consistent deployments of recuring software updates, reducing manual intervention for smoother store operations. By automating and simplifying these setups, you can cut IT management costs by up to 30%. Dell Technology Pro Support Services can assist with this, offering solutions specially designed for hybrid cloud systems. They expertly connect physical stores with cloud resources. Additionally, with PowerEdge XR servers in a hybrid cloud setting, you can easily manage and expand your tech infrastructure, always keeping it current.

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**Where to go from here**

Technology is transforming the retail sector by providing tools to boost profits, improve sales, and tackle IT hurdles. Using updated technology, retailers can offer outstanding customer service, run more efficiently, and set themselves up for long-term growth in a digital age.

Dell Technologies is here to assist retailers in keeping up with needed technology advancements.

With experience from working with top retailers, we offer solutions for both IT and operational issues, whether in physical stores or data centers. We make it easy to get, use, secure, and service the newest tech, with flexible payment options. Thanks to their scalability, straightforward setup, strong security, and easy purchasing, Dell Technologies and PowerEdge servers give retailers a trustworthy tech foundation everywhere, including inside and outside of data centers.
References