

Learning From Lowe's: A Customer-Centric Technology Transformation

How Lowe's is leading with customer experience, underpinned by a large-scale transformation to flexible, scalable and secure technology.



“We aim for exceptional customer experiences. Our transformation gives associates and customers the technology to create those experiences.”

John Dabek

Senior Director of Infrastructure | Lowe's

Business needs

From a small-town store to a North American leader in home improvement, Lowe's knows about large-scale transformations. Across all its retail locations, the Dell VxRail solution is quickly helping Lowe's enable seamless customer experiences with flexibility, scalability and security, for today and tomorrow.

Business results

- Flawlessly implemented new technology in 600 stores in three months
- Provided 10X more capacity to run new and emerging applications
- Enhanced customer experience via novel omnichannel applications
- Achieved high system availability (rated at 6, 7, and 9s)
- Reduced the cost to manage technology solution
- Improved OpEx performance and point of sale (POS) capabilities

Solutions at a glance

- [Dell VxRail](#)
- [VMware vSphere](#)
- [VMware vSAN](#)

Lowe's story is remarkable. From humble beginnings as a small-town hardware store, Lowe's recently celebrated its first 100 years as one of the largest retailers in the world. Then and now, its mantra is unwavering: "to put the people we serve at the heart of everything we do". That mantra rings true in Lowe's latest technology transformation, aimed at enhancing and elevating customer experiences through seamless, frictionless retail.

Lowe's is headquartered in North Carolina where L.S. Lowe founded the company in 1921. Today, All 1800 Lowe's stores (each one sized at a hundred thousand plus square feet each) are adopting Dell VxRail, a flexible, scalable edge technology platform, that is boosting application capacity 10X, reducing costs and delivering consistently high system availability. As a result, Lowe's employees and customers are gaining access to online and in-store applications and information paving the way for next-level customer experiences.

Customer experience is king

Lowe's knows that great customer experiences are the key competitive differentiator in retail today and aims to lead with outstanding customer experiences. Today, Lowe's estimates that over two-thirds of home improvement customers shop online before coming into the store. Thus, Lowe's is undertaking a technology transformation to integrate online and in-store experiences across its 1800 stores.

What does this mean? For example, a customer will order online and pick up their merchandise in-store. Lowe's helps facilitate that with applications that push information to customer mobile devices, providing convenient choices. Customers have the opportunity to pick up the ordered merchandise in-store or self-retrieve via a barcode scan from a Lowe's locker in the external lobby or have the merchandise delivered to their car upon arrival.



"VxRail has driven better OpEx performance for us. We can run existing applications and those being developed. The benefits are just endless."

John Dabek

Senior Director of Infrastructure | Lowe's



configuration because we didn't have the capacity in the store to roll out these new applications and functions," states John Dabek, Senior Director of Infrastructure for Lowe's.

Security, integration and independence

With the public cloud, the private cloud and edge technologies all working together, Lowe's needed a secure, scalable solution that was extremely easy to manage both centrally and remotely. VxRail provided a flexible, resilient and secure infrastructure, generating immediate benefits while establishing the ability to scale for future needs.

From an edge perspective, each Lowe's store integrates online

"At Lowe's, we are leading with exceptional customer experiences. Our transformation to VxRail across all of our 1800 stores gives associates and customers the technology to create those experiences," shares John Dabek, Senior Director of Infrastructure for Lowe's.

10X application capacity boost at a lower cost

To orchestrate a transformation of this size and scale and expand capacity for Lowe's complex needs is a tall order. VxRail ticked all of the boxes, running more workloads, better OpEx performance and the ability to expand while the system is running. While providing sophisticated capabilities, the technology platform's simpler, modular, automated management enables Lowe's to run it at a very low cost. As a result of Lowe's edge strategy, the system availability is extremely high, performing at 6, 7, and 9s, a vital metric as stores cannot afford to be down.

In addition, Lowe's has gained newfound capabilities to empower employees and help generate the best possible customer experiences. "Our new technology has given us the capacity to employ applications that help our associates assist customers with their Lowe's experience. This was not possible with our previous



"Michael Dell described our approach, 'It's the public cloud, the private cloud and the edge, all working together to service the needs of the enterprise.'"

John Dabek

Senior Director of Infrastructure | Lowe's



“VxRail gives us the capacity to keep building our applications and work together, across POS, tracking inventory, pricing changes, or sales.”

John Dabek

Senior Director of Infrastructure | Lowe's

and in-store experiences and across locations. Concurrently, Lowe's needs each store to be able to operate independently. That way, in the event of a network and backup failure, the store can continue to operate. From a workload perspective, all point of sale (POS), inventory and pricing functions run independently at the store level and sync with the core systems in the database.

Security is at the top of the technology requirements list at Lowe's. VxRail comes with a robust security structure allowing Lowe's to appropriately manage security.

Deployment now and in the future

Lowe's first deployment at 600 retail stores was implemented without a hitch. For the next 1200 stores, Lowe's plans to incorporate GPU capabilities. This is because future retail innovations will require compute-intensive applications like artificial intelligence (AI) or video. GPU-enabled applications help Lowe's in areas such as checkout security and inventory management.

“With the help of Dell Technologies' services, we implemented the first 600 stores in three months and not a single store noticed we had changed out the systems. We had to be up and running by 5 a.m. so our contractors could pick up their merchandise. We did it. Lowe's is extremely pleased with our Dell technology transformation,” says John Dabek, Senior Director of Infrastructure for Lowe's.