

# Solodev DCX Case Study: LYNX



## Executive Summary

The Central Florida Regional Transportation Authority, better known as LYNX, provides thousands of people in Metro Orlando and surrounding areas with public bus and transit services. To meet the needs of their growing communities, LYNX required a modern, mobile-first website that enriched the rider experience with access to trip planning tools, schedules, alerts, and more. They also required an upgrade to their legacy content and aging code base to improve SEO and ADA accessibility. Solodev DCX – powered by AWS – provided a highly functional, easy to use content management (CMS) and customer experience platform that enabled their non-technical communications staff to take control of their website and reduce the burden on IT. Solodev also built a dynamic, PCI-compliant retail shopping cart for purchasing tickets on the LYNX website from any device. Together, Solodev and AWS helped LYNX transform their brand by elevating the digital customer experience across the rider's journey.

## Customer Challenge

With over 1,500 people moving to Central Florida each week, the Orlando Metro population is predicted to reach 5.2 million residents by 2030, taxing the local infrastructure and placing greater demands on public resources. As roads and highways become further congested and urban sprawl more pronounced, LYNX has become a community lifeline for connecting people and places. To meet the explosive growth ahead and serve commuters that rely on public transportation, LYNX needed a comprehensive digital transformation strategy to modernize its website and applications.


One of the biggest challenges facing LYNX was the age of their website. Not only was the user experience dated, but the underlying code and architecture were creating issues around performance, speed, and functionality. Because it had been hosted on prem, there were significant limitations around availability and uptime. For example, if there was a hurricane or emergency event, the website was unable to scale rapidly if traffic ballooned. Additionally, their internal communications team lacked the technical skills to make custom changes and updates, placing a burden on IT staff or a delay with third-party developers. The aging website was also impacting their ability to deliver ADA accessibility for riders with disabilities, which also diminished SEO performance.

Based on Google Analytics data, LYNX saw more of their website traffic shifting to mobile devices. As passengers were on the move, they were utilizing their smartphones to search for schedule updates or route changes that might affect their bus planning. Because their existing site was not optimized with a modern mobile responsive framework, it created significant usability challenges across different devices.

## About LYNX



Each day, well over 100,000 passengers rely on LYNX to reach their destinations across Central Florida. As the region's trusted authority for bus and public transit services, LYNX provides safe, clean, reliable transportation solutions and serves as a connector for urban and suburban communities. Headquartered in downtown Orlando, LYNX has developed strategic partnerships with SunRail, the Florida Department of Transportation, and other agencies to pioneer new ways to address transit needs in the areas they serve. As the first bus agency in the nation to build, blend, and operate its own biodiesel fueling station, LYNX is committed to finding innovative ways to reduce emissions and improve the rider's journey through exceptional service.



Finally, as rider habits continued to evolve in the digital age, the option to purchase bus tickets online was becoming less of a convenience and more of a necessity. While physical tickets could be procured at the LYNX station, mobile devices provided an ever-present conduit to convert occasional users into loyal riders. But LYNX needed more than just a secure retail shopping cart on their website. To grow their traffic and drive more purchases online, they had to shift from being a public sector agency to a consumer-focused eCommerce brand.

### **Why AWS**

When considering the future of their IT operations – and the critical role of their website for transforming the rider experience – LYNX wanted a cloud strategy that could scale with their future growth. AWS was an ideal choice for their needs, allowing them to trade CAPEX for OPEX and shift to a more cost-effective model that reduced the burden on their IT staff. As ridership increased, they also wanted a more scalable solution for handling variable capacity and managing the growth of their traffic in the future. Having already selected Solodev DCX as their content management platform, choosing AWS as a hosting infrastructure was a natural choice; not only was Solodev exclusively designed as a cloud-first platform in AWS, but it was also available in the AWS Marketplace in a multitude of deployment options.

The AWS brand was also a key factor. When considering the scalability, redundancy, and high availability requirements of their web and digital experiences, LYNX wanted a partner they could trust to deliver the next level of their retail eCommerce strategy, particularly around security. In addition to meeting fierce governance requirements for PCI, AWS also provided SOC-2/SOC-3, ISO, and other leading governance and compliance benchmarks – providing confidence in their decision to move their website workloads to AWS.

### **Why Solodev DCX**

LYNX chose Solodev as a partner because of their reputation, proven customer satisfaction, and their unique blend of public sector and commercial expertise. In order to fully transform the rider experience and focus on digital ticket transactions, they needed a partner that understood complex, mission-focused organizations like cities and municipal agencies – as well as consumer-centric brands with eCommerce business applications. Solodev also offered a complete engagement, providing the Solodev DCX platform along with turnkey implementation services. This meant that LYNX could tap a single partner to redesign the frontend UI/UX, develop the entire project on the Solodev DCX platform, and deliver their custom eCommerce solution.

Solodev also offered complete training and 24/7 support to help their low-code/no-code communications team become proficient on the Solodev DCX platform. Given the potential for daily changes to their schedules and routes, LYNX wanted more control to update their riders across multiple channels. Solodev would allow them to make rapid changes directly to the website – all without the need of IT or third-party development services. This would also improve their ability to respond to emergency situations with up-to-the-minute information. With Solodev DCX, LYNX would also have a more efficient content management tool to support their marketing efforts. Finally, as an APN Advanced Technology Partner, Solodev provided ongoing support to help monitor and maintain their instances and deliver optimal performance.

## Partner Solution

The LYNX brand is about connecting every rider with the places that matter – and to keep the community moving. To express this commitment, Solodev conducted a discovery and research engagement that focused on the rider's journey. First, the new LYNX website needed to be simple and accessible, providing a clear path for every visitor to find the right information within a click. Second, LYNX needed to maintain its brand as a trusted community partner while transforming into a consumer retail channel for purchasing tickets.

To meet these challenges, Solodev designed a beautiful, lightweight, mobile responsive website that was easy and intuitive for anyone to navigate. It featured a complete suite of trip planning tools, enabling riders to manage every step of their journey by connecting with schedules, routes, and maps. Solodev built an integration that enabled rapid updates to their Google transit information, providing up-to-the-minute information on bus delays or route changes. They also developed a custom alert system that could be modified and scheduled based on specific emergency details. All of these capabilities could be managed without code, making it simple for their team to use.

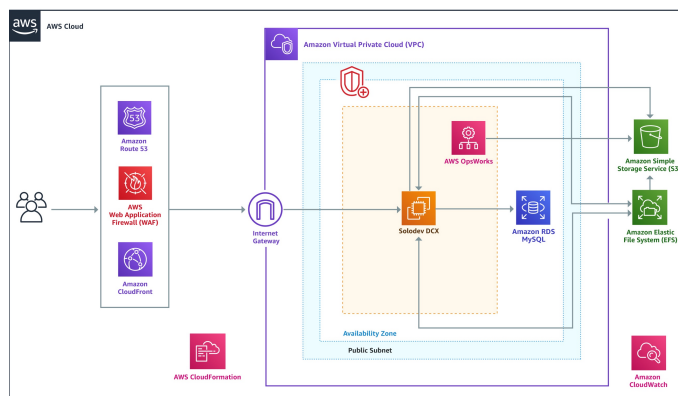
Solodev also delivered a custom, PCI-compliant retail shopping cart for purchasing tickets via the LYNX website. This easy-to-use storefront featured multiple options – from fixed route youth passes to multi-day advantage passes – all delivered within a seamless brand experience. It expanded their ticketing footprint and transformed the on-the-go rider experience with a 21<sup>st</sup>-century mobile channel for purchasing services. Solodev also helped LYNX address their compliance challenges with confidence: the layers of security and monitoring from Solodev and AWS addressed data privacy while their modernized data structure improved their ADA accessibility.

Solodev harnessed the power of the **AWS Cloud** for LYNX by orchestrating a number of services, all automatically deployed via **AWS CloudFormation** in a secure **Amazon Virtual Private Cloud** – and protected by **Amazon Web Applications Firewall (WAF)**. **Solodev DCX Professional Edition** – available through the **AWS Marketplace** – was chosen as an ideal configuration for LYNX's traffic, availability, and budget. Solodev DCX was deployed on an **AWS Elastic Compute Cloud (EC2)** server and fully managed by **AWS OpsWorks**, featuring an **Amazon RDS MySQL** database and **Amazon Elastic File Storage** for scaling resources up and down as needed. Objects were stored in **Amazon Simple Storage Service (S3)**, and the environment monitored by **Amazon CloudWatch**. LYNX also added **AWS CloudFront** to improve site speed.



## Solodev® DCX Professional Edition

AWS Reference Architecture





## Results and Benefits

By building their new website on Solodev DCX – powered by AWS – LYNX has transformed the digital customer experience and enhanced rider engagement from their smartphone to their final destination. The retail shopping cart has been a gamechanger, providing an entirely new channel for serving the rider wherever they are on their journey. The result is a secure, scalable, and highly available mobile-first website that has improved rider insights, expanded purchasing options, and elevated brand loyalty and retention.

By enhancing the mobile experience, LYNX has expanded the connection with their audience at the most essential touchpoint – and futureproofed their growth in a mobile world. Additionally, the visitor's time on the website was significantly improved thanks to faster load times and a more streamlined navigation. The new design has made the experience more compelling, intuitive, and accessible to their community of riders. **Following the launch of the new website, LYNX saw double the visitors and page views.**

With Solodev DCX's easy-to-use backend managers, the LYNX communications team is able to make split-second changes to content – including alerts and updates to bus schedules – and take control of their website with little to no code. **As a result, LYNX has saved thousands of dollars and significantly improved their team's productivity while reducing the burden on IT and outsourcing.**

Thanks to AWS, LYNX also has a secure, redundant, affordable cloud hosting platform to build their digital strategy on. By moving to the cloud, they have transformed their legacy hosting and futureproofed their infrastructure for innovative new services coming from Solodev DCX. They also have the ability to rapidly scale their resources during an emergency, so their website stays up when their riders need it most. AWS has also helped optimize their annual hosting spend by eliminating hardware management.

## Next Steps

Solodev continues to manage the ongoing monthly support of the LYNX website and their AWS infrastructure, ensuring they meet key performance indicators for security and uptime. As their digital strategy continues to evolve, Solodev and AWS will be their go-to partners for innovation – providing a roadmap of new features to improve the rider experience from end to end. As LYNX looks ahead, Solodev and AWS will continue to optimize their digital ecosystem.

## About Solodev

Solodev DCX is a content management (CMS) and customer experience platform that lets individuals and teams work together on their digital transformation in the AWS Cloud. Businesses and organizations of all sizes collaborate on Solodev DCX to build feature-rich websites and applications, distribute content across channels and devices, review code, and publish their most ambitious ideas to the world with training and 24/7 support – all powered by AWS. Solodev DCX is available in both single and multi-tenant options, and through the AWS Marketplace in Lite, Professional, and Enterprise Editions, including container deployments for both Docker ECS and Kubernetes EKS. Solodev is an Amazon Partner Network (APN) Advanced Technology Partner ISV with competencies in Government, Education, and Digital Customer Experience. Learn more at [www.solodev.com](http://www.solodev.com)

