



Challenge

Each year, LYNX – the bus system run by the Central Florida Regional Transportation Authority – powers nearly 25 million passenger trips. For thousands of daily riders, LYNX is an essential bridge to their destination, whether it be work, home, or play. As a trusted public agency, LYNX is focused on the promise of safe, comfortable, affordable, and reliable travel across an ever-growing region, with hundreds of vehicles in service. Their employees help connect passengers to multiple stops in countless communities, as well as alternate modes of transportation, from van pools to train service to bicycles.

In an effort to better serve passengers and their preference for digital engagement, LYNX wanted to evolve their website and modernize their eCommerce experience. For years, it had maintained a fragile storefront with limited capabilities; meanwhile, more of their users were shifting ticket purchases to mobile devices. To handle the increased load and embrace this growing channel, they needed a platform that could be highly customized around the rider's journey.

Additionally, LYNX was concerned about its riders with disabilities and ensuring that the physical and digital experiences were in sync. Their website needed to be ADA accessible at each stop, from finding a bus route to purchasing a ticket pack.

From a cloud standpoint, LYNX needed the continued assurance of AWS to meet increased ridership. As their local populations continued to boom, it became more important to ensure uptime and provide integrated connections to third-party services for checking bus schedules or connecting to their native app.

Finally, LYNX needed the flexibility to alert passengers through their website. Regardless of the incident, LYNX wanted their communications team to quickly update content – without the need for code – and post emergency changes to schedules, routes, and more.

Solution

LYNX turned to Solodev to help transform the digital rider experience. By working with Solodev's professional services agency, DigitalUs, LYNX was able to conduct several focus group sessions with key personnel. This collaboration allowed the DigitalUs team to capture the right experience points and reflect the needs of a diverse audience of riders.

DigitalUs also took a data-driven approach, analyzing page traffic, geographies, and user personas as part of the wireframing and design phase. The result set a new standard for public transportation websites: a beautiful, lightweight experience that helped users quickly find the right information and services to improve their ride. This included a more streamlined path for planning trips and checking the status of any bus. The new LYNX website was also built with a mobile-first responsive framework, allowing it to easily translate from smartphones to tablets to desktops.

Custom functionality in the Solodev CMS made the new LYNX website easy to manage – especially for low code/no code content professionals. This included the rapid updating of bus routes, which could now be added with their Google transit information.

One of the biggest areas of modernization was the digital storefront. With a new custom cart built entirely in Solodev, LYNX was able to provide a clean, streamlined, PCI-compliant process for buying physical bus tickets and shipping to a user's address. Along with a simplified navigation and API-driven connections to third-party services, the new LYNX website was built with accessibility in mind, providing users with disabilities an equitable experience.

As is the case with any bus authority, delays or emergency events can impact everything without notice. To provide greater flexibility to the LYNX communications team, Solodev engineered a custom alert module for rapidly sharing changes via the website. Now, when routes need to be updated in rapid fashion, a temporary alert can be activated and automatically scheduled to expire.

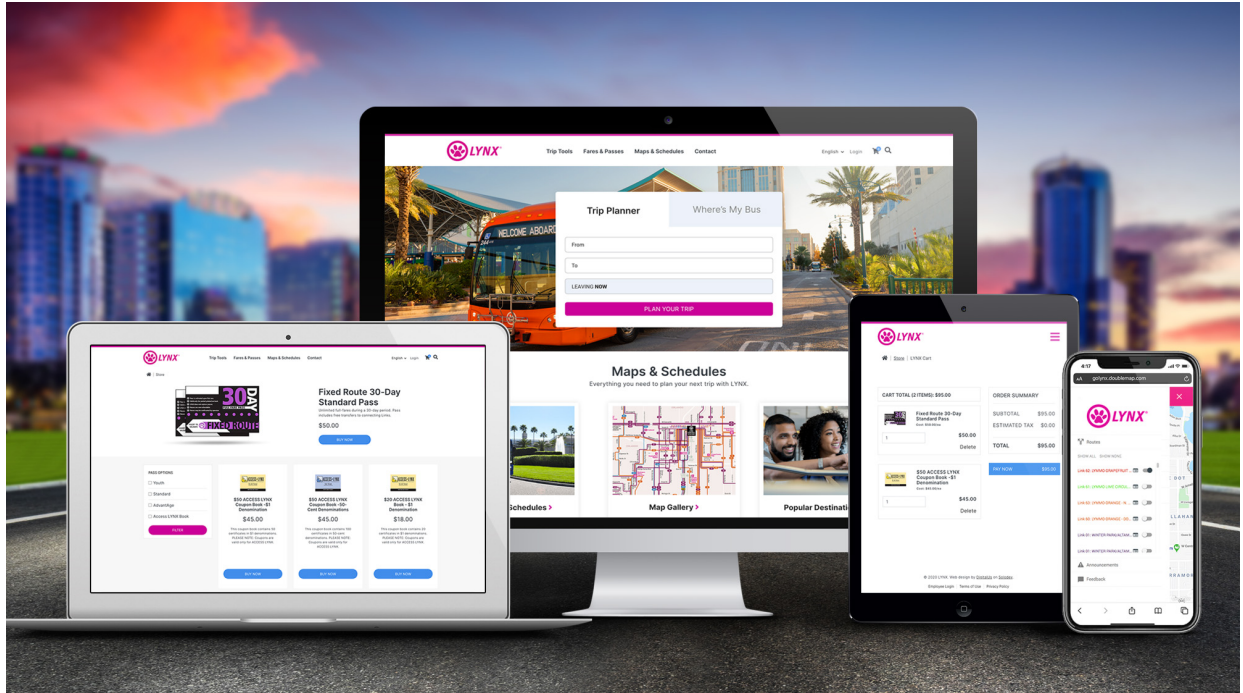
Amazon Web Services (AWS)

To optimize their hosting and trade CapEx for OpEx, LYNX tapped the power of AWS through Solodev. As an Amazon Web Services APN Advanced Technology Partner, Solodev was able to architect the right set of AWS cloud services – and deploy instantly using **AWS CloudFormation**.

Solodev also deployed **Amazon CloudFront**, an extremely powerful CDN that drastically increased the delivery speed of LYNX's website by caching data to the edge of the CloudFront network. This also provided an added layer of uptime assurance while improving the latency of the website.

The LYNX website was launched on a stack featuring **Amazon Elastic Compute Cloud (EC2)** and managed with **AWS OpsWorks**, providing auto-scaling capacity to meet heavy or even unexpected traffic spikes without experiencing a crash. OpsWorks also provided powerful tools to DevOps and infrastructure teams to manage server health, versioning, and more.

Along with the **AWS Virtual Private Cloud (VPC)**, LYNX has increased security and privacy via network firewalls and Amazon's best-of-breed security technologies and compliance practices.



Results

“Enjoy the ride” is a simple statement – but a mission worth aspiring to. In the case of the new LYNX website, the goal was the same: make browsing enjoyable, regardless of what any rider is looking for. When first launched, LYNX saw more users shifting to mobile. The storefront, now stable and secure, brought a new standard to transit authority eCommerce. Easier to manage, the communications team also launched with the confidence of a more ADA accessible experience for their riders.

Powered by AWS, LYNX also had the confidence of uptime. By hosting in the cloud and powering their experience with a CDN, they were able to accelerate the performance of the website and respond more quickly to changes in their operations or infrastructure – planned or otherwise.

Adjusting the “Digital Rider Journey” through a pandemic

When it comes to the roads, emergencies are a common occurrence. What isn’t is a pandemic.

As the trusted brand for public transportation across Central Florida, LYNX had to quickly respond during COVID-19 to provide their riders with critical, up-to-the-minute information. As fares were adjusted and schedules modified, the LYNX website became the focal point for communicating with their audience – many of whom depended on busses to provide essential work.

Throughout the pandemic, LYNX has leveraged the power of Solodev’s custom alert module to share vital news and information about fare collection, new or cancelled routes, and specific COVID-19 related information for safely traveling on their vehicles. The website has allowed their communications team to rapidly respond to a fluid situation and help support the safety of the communities they serve.



About LYNX

LYNX is bus system run by the Central Florida Regional Transportation Authority, serving the greater Orlando, Florida area in Orange, Seminole, and Osceola counties with limited service to Polk County. To learn more about LYNX, visit www.golynx.com

About Solodev

Solodev, the Digital Customer Experience Platform for AWS, empowers individuals and teams to create amazing customer experiences in the cloud. Built from the ground up on Amazon Web Services (AWS), Solodev provides unparalleled security, scalability, and redundancy with 24/7/365 U.S. based support. Recognized as a leading “High Performer” on the [G2 Grid](#) for Web Content Management, Solodev has been featured on the Inc. 5000 for the last four consecutive years. An AWS Advanced Technology Partner with Competencies in Government, Education, and Digital Customer Experience, Solodev products can be purchased on-demand via the [AWS Marketplace](#), through State and Federal Contracts, or online at www.solodev.com