

Smart Digital Signage Powers Up EV Charging Stations

[insight.tech/retail/smart-digital-signage-powers-up-ev-charging-stations](https://www.insight.tech/retail/smart-digital-signage-powers-up-ev-charging-stations)

March 28, 2022

March 28, 2022

[Teresa Meek](#)



As consumers and governments push for a cleaner, greener environment, sales of electric vehicles (EVs) are soaring and automakers are retooling factories to ramp up supply. What’s missing from the picture is charging stations. There aren’t nearly enough to meet the coming demand, and concerns about setup costs and profitability have made many business owners reluctant to install them.

Adding smart digital signage to charging kiosks resets the business model, allowing companies to recoup their costs while learning more about customers and increasing sales of other products.

“With digital signs, the EV charger becomes the means to an end. As people are getting a charge, they watch streaming content that can make money for the business.” says [Chris Northrup, Vice President of Digital Media and Networking Strategies, at USSI Global, a broadcast, network, and digital signage solution provider.](#)

EV charging kiosks with digital signage can be used by many types of businesses—not just service stations.

“A kiosk can be any place where people can park for 20 or 30 minutes,” Northrup says. “Quick-serve restaurants, supermarkets, shopping centers, movie theaters, hotels, theme parks—all are good candidates.”

The Key to Success: A Computer Vision System

The USSI Global EV charging kiosks are shaped like gas pumps, with 55-inch, attention-getting digital screens. The color display is designed to remain vivid even in bright sunlight.

But what really makes the screens effective is the computer vision (CV) technology behind them. A pinhole-sized, CV-enabled digital camera embedded in the screen collects footage of charging customers and passersby. AI algorithms running on Intel® processors analyze this information in real time, determining gender, relative age, and mood—and for charging customers, the type of vehicle they're driving.

To maintain customer privacy, facial images are not stored on computers—only the digital information about them is collected and processed.

The algorithms then trigger sign content likely to appeal to individuals or groups watching the screen. For example, it might show Tesla accessories to a Tesla owner. Others may see demographic-based information about health or fashion products. The system measures how long people watch and whether they turn away, quickly changing content that isn't deemed effective to something more suitable.

“The signs are smart enough to start playing more of the kind of content that has caught a user's attention. So if someone is drawn to sports, it will start showing more Nike ads,” says Amanda Flynn, USSI Global Vice President of Customer Relations and Business Development.

Companies can also use the screens to entice viewers into their premises with on-the-spot promotions, such as offering free coffee with the purchase of a food item. “Customers come back out, sit in their car, and eat and drink what they just bought while they're waiting for a charge,” Northrup says.

Digital promotions can be scheduled in advance. For example, a charging station operator can arrange to run a New Year's special and have the content automatically return to normal the next day. Operators control content delivery remotely and can select content for multiple screens in different locations with the press of a button.

As the need for #ChargingStations grows, enhancing them with #DigitalSigns could provide the incentive operators need to fill the demand. @USSI_1985 via @insightdottech

Smart Digital Signage Increases Profitability

Charging can take 20 to 30 minutes or more, giving businesses plenty of time to display money-making ads to a captive audience. But the content doesn't have to be all advertisements. USSI Global is working with broadcast networks to incorporate television

programming, which could range from cooking and home improvement shows to live news and local sports coverage.

“Maybe in Georgia you’re playing a Georgia Bulldogs game, and in Alabama you’re showing the Crimson Tide,” Flynn says. The large screens can also be divided to simultaneously show programs and related ads, such as for team merchandise.

Over time, analytics will reveal trends about people who frequent the charging station and the surrounding area. That will enable companies to create even more effective content for their signs and adjust the menus or products in their adjacent businesses to better suit customers, boosting profitability.

The combination of advertising and increased business volume will help charging station operators recoup setup costs quickly and cover the expense of providing a charge, Northrup says: “The charging can be free because the revenue generated from the content you display offsets the cost.”

Free service is a competitive advantage that will draw more charging customers, who may also spend money at the business. With additional eyeballs viewing the ads, advertisers may also pay operators more to display them.

Getting Started with Charging Stations and Digital Signage Displays

For businesses that would like to deploy charging stations, USSI Global provides a total service model from product to permitting and installation to infrastructure. It also provides post-installation service, fixing problems such as a disrupted internet connection, a failed screen, or a kiosk that gets bumped by a vehicle.

In addition, the company collects and processes data from the digital signs and sends the information to charging station owners, who can use it to create content and settings, including adjusting the parameters for ad changes. While some companies produce their own content, others rely on third-party providers or work with USSI Global, which has partnerships with content providers.

A Cleaner, Brighter Future

As the need for charging stations grows, enhancing them with digital signs could provide the incentive operators need to fill the demand. “I think you’ll see more and more businesses with two or three of them in front of their place,” Northrup says.

And as AI becomes more sophisticated, it will lead to deeper and more valuable customer insights.

“AI started out giving answers to yes-or-no questions and now it measures demographics and mood. Capabilities will become greater over time, enabling more complex decisions about content triggering,” Northrup says. For charging stations with AI-enabled digital signs, that means one thing: “There’s nowhere to go but up.”

This article was edited by Georganne Benesch, Associate Content Director for insight.tech.