BAICELLS
CASE STUDY

TASTE of MADISON

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Baicells Case Study

Overview

Madison, Wisconsin is home to young professionals, families, and college students alike. The state's capital sits on a narrow isthmus between two lakes, effectively limiting the infrastructure the city can build and bottlenecking the population into a bustling downtown which drives the city's economy.

Every September, at the beginning of the University's fall semester, the city hosts the Taste of Madison. This is a non-profit event where local restaurants are invited to showcase their dishes to the local populace and support charities, like the Lion's Club, Boy Scouts, and other organizations.

Overview - Cont

This year, following the COVID-19 pandemic, Taste wanted to try something different. The event organizers wanted a way to allow for contactless payment system to accelerate spending at the beer tents, one of the largest money-makers for the whole event.

The profits earned at these tents would go directly to the volunteers of the organizations that the tents represented. The problem Taste encountered was all the solutions that involved public networks ran the risk of being overloaded by the influx of visitors who would be attending the event that weekend.

The Problem

Taste of Madison is focused on providing food products to drive non-profit activities, a particularly delicate offering when considering the recent pandemic. Contactless payments systems have been standardized due to the cleanliness of the process with cash transactions falling by the wayside in recent years.

Taste needed a way to utilize a contactless payment system, but they couldn't run the risk of using a public cellular network that could tip over due to it being overloaded by the influx of visitors at the event. For reference, Madison's downtown population is about 260,000. Taste of Madison brings about 250,000 additional visitors to the downtown area, and the public networks tend to tip over when this influx occurs.

The problem was straightforward. Taste needed to set up a contactless payment system that wouldn't rely on the public network, but they needed to have greater security and reliability than a conventional Wi-Fi network.

The Problem - Cont

They needed a robust solution that could connect their 23 beverage tents and serve as a proof-of-concept for future event networks. However, the stipulation was that this network needed to be quick and easy to setup and be able to scale as future events would require even greater connectivity.

The Solution

Taste of Madison contacted Hoyos Consulting, a local company that provides network consulting and builds event networks across the United States. Taste needed a solution that would enable a contactless payment system that would be easy to setup and reliable.

Hoyos Consulting had worked with Baicells and was familiar with the staff in our Madison, WI based offices. Hoyos contacted Baicells, presenting the problem they were attempting to solve and together the organizations engineered a solution.

HOYOS
CONSULTING LLC
ANDREW HOYOS
Owner of Hoyos Consulting

Baicells and Hoyos Consulting setup a small, private LTE network using two Nova436Qs and 23 Pocket Routers. The Nova436Qs were setup on opposite sides of the Capitol Square with 65-degree antennas that could serve the Pocket Routers that would be stationary at the beverage tents and serve as the internet connection for the contactless payment system. Hoyos Consulting had an existing relationship with the owners of the buildings and had ample access to bandwidth that could serve as the backhaul for the network. The PoS systems were installed at the beverage tents and hooked up to the private LTE network via the Nova436Qs. The network was transmitting at around 30Mbps down and 1Mbps up, which was plenty for the PoS system. The network experienced zero downtime and worked flawlessly throughout the event.

The Solution - Cont

"We're working with Baicells and Hoyos Consulting because they came up with a way to sell drinks in a way that's not only more efficient, it's safer," said Sara Klemme, President of Madison Festivals, Inc. "What I mean by that is we don't have cash going at all of our beverage stands.

It's not exchanging a bunch of different hands. We can monitor inventory in real time, and when people accept credit cards and they can pay with their credit cards, the tips go up. The reason that's important is because Taste of Madison is a fund-raising event and 100% of the tips that come in, stay with our volunteer groups that work the event. Working with Baicells and Hoyos Consulting has let these groups make a lot more money than ever before."

She continues to say, "working with the team has been so easy, so seamless. I didn't expect it to go so well, to be so simple, to work so effortlessly. Every time we think about it I kind of want to cry because it's such a big deal for Taste of Madison."

"Baicells has always been available when we have questions, it's always been fairly rapid and what we would expect from a vendor so we've been happy there," said Andrew Hoyos, owner of Hoyos Consulting. "We can definitely replicate this in other areas, especially in these dense environments where people need alternative access sources that won't get overloaded. We have hope we can utilize this network for other events on the Capitol Square as time goes on."

Conclusion

Establishing a private LTE network for a dedicated PoS system in a heavy traffic area was a straightforward process. With simply two Nova436Q base stations and a couple of Pocket Routers, Hoyos Consulting set up a network that had a ripple effect across the downtown economy of Madison, boosting the dollars spent on fundraisers for local organizations. The network worked flawlessly, and the expectations of what's next for the network continue to grow. Sara expects the network can be used to provide improved services at the upcoming Madison Marathon, among more.

To discover if a private LTE network is right for your next festival or event, please contact our sales team to discuss your options.