

Mist Enables New Wireless Experiences at Premier Shopping Centre



"The Shopping Centre" is a landmark \$1.05 billion, 4.9-million-square-foot property, known for its innovation and design. It is run by one of the top international real estate developers.

"We are a service-oriented business," said the Digital Director for the management company in charge of The Shopping Centre. "We need to understand our customers' behavior and interact with them in a meaningful way so our retailers can thrive."

Key to this directive is a robust wireless network at The Shopping Centre. Employees and guests expect a reliable high performing Wi-Fi service when on the property; Retailers want to interact with mobile users using location-based services, like way finding and proximity messaging, and they want accurate information with respect to customer visits and dwell times; And all the stakeholders require detailed analytics on traffic patterns.

To achieve all of the above, The Shopping Centre turned to Mist. Mist built the first learning WLAN, designed specifically for the smart device era. Mist Access Points work in conjunction with a purpose-built Mist cloud to give unprecedented performance and insights into the wireless user experience. By converging Wi-Fi and Bluetooth® LE into a single wireless infrastructure, Mist saves time and money while also offering the following advantages at The Shopping Centre:

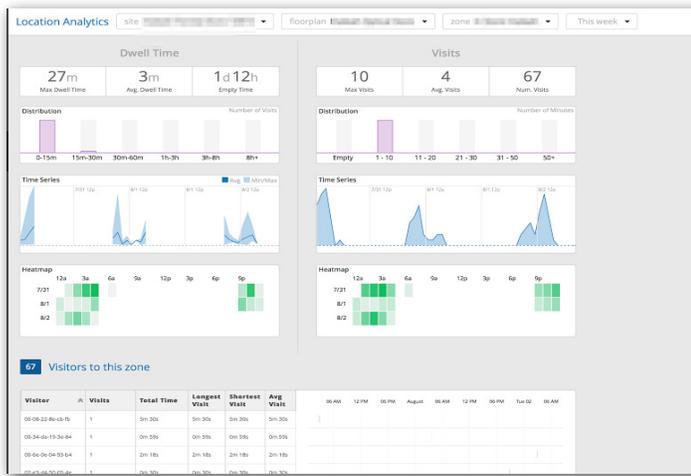
Consistent and reliable Wi-Fi (Phase I)

The property manager at The Shopping Centre had a goal of covering the entire property with Wi-Fi, eliminating the need to switch to in store networks while roaming. They achieved this by deploying Mist AP41s, which are state of the art tri-radio 802.11ac wave 2 Access Point integrated with the industry's first 16 element dynamic Bluetooth® LE antenna array and IoT ports.

"I tested the Wi-Fi in every mall in our state, and no one is even close. I was amazed by both the capacity and coverage. We are reaching even the farthest corners of large department stores, which are notoriously difficult to reach."

In addition, the managers can set, monitor, and enforce Wi-Fi service levels using the Mist platform.

"This is the only WLAN platform on the market that lets me assure users are connecting quickly and receiving adequate throughput when on The Shopping Center's wireless network. In addition, it pro-actively identifies which device types or applications are problematic, and points me to specific parts of my network for easy problem resolution."



Detailed analytics (Phase I)

The Shopping Centre has twenty-five ingress/egress points, which makes it very difficult to identify unique visitors to the property. This in turn, makes it hard to know how many customers visited The Shopping Centre in a given time period and where they spent their time – key metrics that help the property management company (and the respective retailers) best meet customer demand.

“The Mist wireless platform is the backbone of The Shopping Centre. It gives us the data that says what our customer base is doing on-site, which is correlated with other channels so we can maximize the shopping experience.”

The ultimate goal for The Shopping Centre is to get visitors to download and use the mobile application, whereby they volunteer information in exchange for desired services (see below). Mist provides data using the Wi-Fi and the Bluetooth® LE network, such as the number of visitors in a zone, max/average dwell times, and time of day analysis. This information is critical for The Shopping Centre on several fronts. For example, it helps with resource planning, it is used to calculate appropriate staffing levels, it determines leasing rates, drives advertising decisions, and more.

“Every stakeholder requires accurate data to calculate the ROI of their efforts. This is a core practice for the company that dates back to its founders.”

“The company wants a fully integrated, fully intelligent experience on our properties where customers are engaged when they want, in methods that are desirable.”

By downloading The Shopping Center’s application (built by Mist Wireless Alliance partner, Phunware), The property manager plans to interact with visitors when they arrive on

premise, delivering the following types of contextual services for an amazing shopping experience:

- **Way finding** (i.e. turn by turn directions). Shoppers can get an indoor blue dot experience as they traverse The Shopping Centre for easy navigation.
- **Proximity messaging.** Various discounts and promotion can be pushed to mobile users based on their location.
- **Mobile parking payment.** License plate recognition and automated payment
- **Concierge services.** Order drinks or food and have it delivered throughout The Shopping Centre.

Bluetooth® Low Energy is a key technology to enable this engagement. However, the property management company was troubled by the headaches associated with physical Bluetooth® LE beacons.

“I was about to sign a deal for BLE beacons, but was bothered by how something so needed was still battery powered and deficient in so many ways. Then along came Mist with their virtual beacons.”

Mist eliminates the need for physical beacons via a patented 16 Bluetooth® LE antenna array (in Mist AP41 and BT11 Access Points, both of which are deployed at The Shopping Centre). These devices cover an entire room with Bluetooth® LE signals, eliminating the need for battery-powered physical beacons (which are typically deployed every 25 feet or so). With Mist’s patented virtual beacon functionality, greetings can be customized and deployed via software anywhere in The Shopping Centre (or automated via APIs). In addition, machine learning eliminates the need for manual calibration and Bluetooth® LE site surveys, and it ensures location calculations are always accurate.

“Our ultimate goal with BLE is to give our customers value via The Shopping Centre’s application, while streamlining business operations through better location data. Mist is setting the stage for this next level of engagement in a scalable and efficient manner.”

Conclusion

The Shopping Centre’s main objective is to create an amazing experience that benefits both customers and retailers. The right wireless platform makes this all possible.

“We expect great things at The Shopping Centre. Mist is a system we can rely on to stand out and excel in our field.”