Building a Foundation for a Broadband-Enabled Smart Community: The Reef at Winkler

The Reef at Winkler, a new luxury multifamily community owned by MJ Development Southeast and managed by Greystar in Fort Myers, Florida, leverages Boingo Wireless managed Wi-Fi services to deliver consumer broadband and smart-community applications. Our thanks to Matt Valentine, a partner at MJ Development Southeast; Ben Vander Velden, senior channel manager at Boingo Wireless; and Layne Spencer, vice president of sales and marketing for IOTAS, for helping assemble this profile.

By Sean Buckley / Broadband Communities

When MJ Development Southeast devised The Reef at Winkler, a 160-unit, vacation-style community in southwest Florida, standing out from other properties was a key priority. Matt Valentine, a partner at MJ Development Southeast, said during the OPTECH Eye Opener: Technology Case Study panel that this was necessary because real estate competition in southwest Florida is fierce.

“Southwest Florida is the hottest market for apartments in the United States,” he said. “The amount of inventory that is coming into the market and is in the market is extensive. We knew we had to create a differentiator to make this property unique, and technology was the obvious answer for us.”

Valentine added, “We are entering a phase in the technology cycle where the way people interact with their living space is changing dramatically.”

The Reef at Winkler is the first southwest Florida smart community to feature new luxury apartments with home-automation technology. Other amenities include a beach-entry pool, splash pad, Zen garden and state-of-the-art fitness center with interactive online classes.

Amazon is leveraging its partnership with three smart-technology companies – IOTAS, STRATIS IoT and Sentient Property Services – to bring its voice-enabled Alexa service to The Reef at Winkler as part of a broader initiative. This new service is also offered at two other apartment complexes: Parq on Speer in Denver and The James in Annapolis, Maryland.

Among the automation capabilities are a controlled entry gate that recognizes residents and their cars. Smart automated luxury apartments can be managed using voice commands or a smart device.

Valentine said automation benefits multiple parties – residents, property managers and investors. “For anyone involved in the property, there’s a technology component that specifically touches their everyday activity, which for residents is home automation,” he
said. “This is a fully integrated home automation community, so residents get a whole lifestyle experience with the technology.”

The automation capabilities also benefit property management personnel. IOTAS, a smart-home technology for multifamily rental properties, provides leak detection, door sensors and other capabilities.

“IOTAS has done a great job partnering with property management software platforms we’re going to be using,” Valentine said. “The property manager can sit at his or her desk and manage a vacant unit, whether controlling the lights or the air.”

Finally, investors have the potential to gain revenue benefits from the Wi-Fi network. For example, MJ Development includes the Wi-Fi and smart-home technology package in the monthly lease rate.

“This is another differentiator as we bring this property into the market,” Valentine said. “As we move forward, an investor might say ‘we want to make the Wi-Fi or home automation a profit center.’”

INSTANT-ON BROADBAND
At first, MJ Development Southeast “reached out to a national cable company that we thought would be a good fit for the property, but those discussions fell apart fairly quickly,” Valentine said, noting that the cable operator couldn’t meet the property’s needs. “So, we were in the market for a partner that would know the smart devices were always connected, and that gave the residents an uninterrupted experience with their Wi-Fi.”

The developer soon found its perfect match in Boingo Wireless. Boingo has plenty of experience serving multifamily housing properties. Today, the Wi-Fi provider serves more than 300,000 residents across more than 2,200 communities.

When it develops a managed Wi-Fi package for any multiple-dwelling-unit (MDU) community, Boingo takes a comprehensive approach to understand what the client needs. This includes providing not only network connectivity, but also network operations and support.

PROPERTY OF THE MONTH HIGHLIGHTS
~ The Reef at Winkler ~
- Instant-on 800 Mbps broadband service
- Wi-Fi calling
- Google Home and Alexa voice command capabilities
- Smart thermostats
- Connected door locks
- Controlled entry gates with cameras and recognition technology
“After we were introduced to Boingo, we knew it was the best fit,” Valentine said. “When you bring a property such as The Reef at Winkler to the market, you have to deliver on the technology piece – and connectivity is key to that.”

Ben Vander Velden, senior channel manager for Boingo, said that unlike the local cable provider, Boingo could provide the network capacity to support resident broadband and also support The Reef at Winkler’s smart-home IoT initiatives.

“We have a longstanding relationship with IOTAS, and that is how we were introduced to MJ Development,” he said. “Because we came into the process late, we had to scramble to put together a network design.”

Vander Velden added that bringing services to The Reef at Winkler also posed other issues. “Getting a backhaul circuit out to the internet was one of our bigger challenges,” he said. “As always, when we deal with a unique smart community like this, we need to engineer service that exceeds the demands of the residents as we move into a 5G era.”

One element of Boingo’s service is that Wi-Fi is immediately available, a trend that service providers have been extending to new and existing MDU developments.

Boingo’s network provides residents immediate internet access at the time of move in, with speeds up to 800 Mbps. It also serves as the property’s wireless backbone for IoT applications.

“Boingo’s product gives residents a seamless experience when they move into the property,” Valentine said. “The ubiquitous Wi-Fi service Boingo was able to provide meets the needs of our community not only for the short term, but also the long term.”

PUTTING THE I IN IOT

The Boingo network offers instant Boingo Wi-Fi to residents throughout common areas and powers home-automation technology, including smart thermostats and connected door locks. The 365/24/7 managed network fuels every digital touchpoint within The Reef at Winkler: resident Wi-Fi, IoT connectivity and home automation.

Leveraging the IOTAS application, residents get immediate control of apartment lighting, and door locks and climate control can be managed from residents’ smartphones or virtual assistants, including Google Assistant and Amazon Alexa.

Layne Spencer, vice president of sales and marketing for IOTAS, said that what’s different about its implementation of Amazon Alexa for residential products into its app is that, like the broadband connection, residents can access it as soon as they move into a unit. With a voice command, residents can turn on lights, pick fan speeds, control the temperature and lock and unlock doors.

“The way that Alexa for residential is different from putting a device in a unit is that it is a fleet management-style way to pull in full, always-on voice capability,” Spencer said. “Alexa becomes a part of the smart-apartment ecosystem.”

Property staff can automate vacant units as well as common areas and amenity spaces and facilitate self-guided tours that allow prospective residents to understand the benefits of living in a smart community.

No less important is managing the health of each unit and the property itself. Property managers can set notifications and alerts tied to the IoT system within units so they can get ahead of potential issues such as leaks, low batteries, humidity or temperature problems.

By taking a consultative approach with property owners, IOTAS has developed a smart-community playbook, which includes recommendations and
offers full project-management services and best practices for a new build or a retrofit property.

“One of the opportunities is to have discussions with owners to understand their operational objectives and what kind of experience they are looking to deliver for the resident,” said Spencer. “We want to make sure we make some recommendations and bring things to the table that will meet the owner’s objectives.”

Spencer said the main challenge is “tackling the connectivity question.”

“When we start initial conversations with owners and operators who maybe have decided to roll out smart-home technology, they have not thought through the ins and outs of connectivity. This is where partnerships with folks like Boingo are key because they can provide the backbone to run all of the technology solutions, including IoT.”

MJ Development did not know initially how it would structure the property with smart technology, and Valentine suggested that other developers should “start with the technology.” Boingo and IOTAS enhanced The Reef at Winkler property in two ways: providing a consistent internet experience to the residents and customer support.

“We have miles and miles of fiber in this project,” Valentine said. “If you don’t get the right connections or the right number of connections within each unit and MDF closet and everything that goes back into the property, it will be difficult to deliver the end-user experience.”

**NAVIGATING COVID-19’S EFFECT**

With its Alexa capabilities, The Reef at Winkler can help potential residents navigate the property during the COVID-19 pandemic.

When residents are self-touring or touring with a lease agent, they can experience all voice capabilities and ask Alexa questions, such as “Why would I like living at The Reef at Winkler?” and “What amenities are nearby?”

“COVID-19 changed the way people approach a property, and these features will allow them to take a self-guided tour and tell them about the property and the technology features,” Valentine said. “Amazon Alexa has begun some customization that will be specific to this community.”

Property owners are navigating other challenges brought on by the pandemic. Valentine said the spike in residents working from home was the biggest change. “When you have glitchy Wi-Fi or you don’t have enough bandwidth to work from home within an apartment, it can be detrimental not only for the resident but also for their company,” he said.

**VITAL STATISTICS**

**Property Description:** The Reef at Winkler is a new-construction, multifamily project in Fort Myers, Florida, with pre-leasing and virtual tours available now. The smart community powered by Boingo features two- and three-bedroom luxury apartments with modern, open living spaces. Amenities include a beach-entry pool, splash pad, Zen garden and state-of-the-art fitness center.

**Demographics:** Millennials and empty nesters

**Greenfield or retrofit?** Greenfield

**Number of units:** 160

**Style:** Resort-style, mid-rise

**Time to deploy:** A four-phase construction process is underway. In the first phase, the network was completed. Pre-leasing of the first two buildings began in December. The third building will open in February, and the fourth building will open in March.

**Date services started being delivered:** Boingo launched its network in October 2020.

**Any special requirements that the property had:** The property required a next-generation, managed Wi-Fi network that could deliver connectivity to residents in their units and throughout common areas and power home-automation technology, including smart thermostats and connected door locks.

**SERVICES**

**Services:** Boingo offers residents up to 800 Mbps broadband access and Wi-Fi calling. Residents can use the broadband network to access online video services and common-area wireless services at the clubhouse and other locations, as well as concierge and home-automation services. The building manager also gains access to a host of solutions, including access control, home monitoring and control, and building management systems.

**Provider choice:** Boingo is the main provider.

**Do additional service providers operate separate broadband networks on the same property?** No.

**TECHNICAL SUPPORT**

**Is the point of contact for resident technical support the property manager, the service provider, or a third party?** Boingo offers 365/24/7 customer care to residents.

**BUSINESS**

**Which parts of the network are owned by the service provider, and which parts are owned by the property owner?** The cabling infrastructure, including the Cat 5e, is owned by MJ Development Southeast. The

With a voice command, residents can turn on lights, select fan speeds, control the temperature and lock and unlock doors.
electronics were installed and funded by Boingo, so there’s no outlay to the development team. Boingo retains ownership of the electronics during the contract. After the contract expires, ownership will revert to MJ Development Southeast.

Is there any evidence that the network helps attract residents, retain residents, increase property values, or provide other benefits? As one of the first smart-home communities in southwest Florida, The Reef at Winkler will differentiate itself from other properties. Residents will be able to access high-speed Wi-Fi broadband and a host of home-automation features upon moving into the property.

TECHNOLOGY

Broadband architecture: Fiber to the building and Wi-Fi to distribute signals in each unit. Boingo uses Ethernet/Cat 5e to a switch in each unit and to a Wi-Fi access point in each unit. There are four buildings and a clubhouse. Fiber comes to the development from the street to the MDF closet. Then, there’s fiber connecting all the buildings. Within each building, there are managed switches and an IDF closet in each building. Coming out of the IDF closet, there is Cat 5e going to a switch in each unit and to an access point in each unit.

Vendors/products:
- Amazon (voice-enabled service)
- Boingo (Wi-Fi services)
- IOTAS (home automation)
- STRATIS IOT (automation software)
- Sentient Property Services (home automation)

LESSONS LEARNED

What was the biggest challenge? Engineering the network for connectivity demands of the 5G era

What was the biggest success? A seamless launch and providing internet speeds of up to 800 Mbps

What should other owners consider before they get started on a similar deployment? Traditional Wi-Fi and cable models no longer cut it for today’s residents. To stay ahead, leading property owners must turn to propertywide, managed Wi-Fi networks to adapt, compete and grow in the digital age and to create new sources of revenue.

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