The Future of Connected MDUs Starts Today

Smart properties satisfy residents, reduce expenses and increase revenues – but they require robust networks.

By Alistair Chatwin / *Multifamily Broadband Council*

Multiple-dwelling-unit (MDU) owners are continually innovating to attract new residents with value-added services. Some have found interesting ways to simultaneously deliver amazing resident experiences, generate additional revenue and save money and time for the properties and ownership groups.

Let's start with the assumption that everyone and everything on a property will need a connection to the local area network and the internet. Although this may seem far-fetched, Gartner estimates that there will be 20 billion connected devices worldwide by the end of 2020. These include not only computers, iPhones, gaming consoles and TVs but also door locks, thermostats, lightbulbs, refrigerators, microwave ovens and more. If a device has an electronic chip, it can, and probably will, be connected.

Once everything is connected, a property can manage access and monitor performance of the Wi-Fi, internet of things (IoT) and property management system (PMS) platforms from a centralized, cloud-based portal.

This can have a huge impact on residents' move-in experiences, their ultimate satisfaction and their tenure of stay. Analyzing the move-in process for new residents makes clear how properties and ownership groups can transform this impactful first phase of resident experience.

Instead of the process you're familiar with today, consider the following: Residents sign electronic lease agreements, enter their personal information into a secure PMS and receive their network credentials via email. These network credentials are shared electronically from the PMS to the cloud-based managed Wi-Fi portal. When residents move in, they already have the credentials they need to access the Wi-Fi network, the internet and the cloud-based portal.

Once a resident has network access and has been assigned a unit, the system automatically assigns ownership of all smart devices for the assigned unit to the resident for the duration of the lease. The resident has access to the unit's electronic lock, thermostat, lighting, water heater and any other IoT devices property management can remotely manage and control.

Now, with access to a secure personal network, the resident can set up IoT devices for security, smart plugs, speakers, lightbulbs or Amazon Echo and Google Home devices. If the resident isn't comfortable doing this or doesn't have the time to set up connected devices, the property can partner with its network provider for setup service.

If there is a propertywide managed Wi-Fi network, residents can go anywhere on the property and still have full access to their private connections. At the gym or pool, they can watch Netflix and make Wi-Fi phone calls. From the clubhouse, they can send work documents to the printers in their units or control their connected devices, all over their private, secure networks.

When residents move out, their credentials expire on their contract dates. The PMS triggers notification to all other portals to remove any devices associated with these residents and wipes their credentials from the system. All IoT devices revert to the property account, and the devices' preconfigured settings for an empty unit are applied until the next resident moves in. The thermostat adjusts for energy conservation, the water heater turns off and the lights remain off unless manually activated by the property manager during a showing. If a resident renews a lease, the system automatically extends access to all the unit's associated smart devices without interruption.

This will be a great experience for residents and will have a significant impact on retaining property managers and leasing agents. The improved process eliminates duplicate work while improving resident experiences and reducing complaints. Additional revenue can be generated by advertising the building as a smart property, and the utility savings on vacant units will reduce expenses.

The tremendous benefits of smart properties are already being realized across the United States, but there are multiple considerations to ensure that a property is prepared. One key consideration is making sure the property's network is capable of supporting this kind of deployment. Be sure to talk with your service provider early in the exploration process. ❖

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