AU - The Future of Home Automation

**Evan Troxel:** [00:00:00] Welcome to the Archispeak podcast.

And today we are joined by two guests and we're talking about the future of home automation. In this episode, we're joined today by Jeff Thomas and Michael Smith. Welcome to the podcast, Jeff. Great to meet you for the very first time.

**Jeff Thomas:** Yeah, likewise. Thank you.

**Evan Troxel:** Michael, we've been on calls before, but this is the first time on the podcast.

Great to have you.

**Michael Smith:** Thanks. Excited to be

here.

**Evan Troxel:** want to start with just kind of a quick little background for both of you guys so that we can kind of orient the audience to what you guys have done to get where you are and then what you're doing. So, Jeff, why don't you kick us off?

**Jeff Thomas:** Yeah, I, I've spent most of my career in the smart home space joining Control4 back. Really when Control4 started in 2000, just after they started in 2004. been a product manager the whole time with them covering a variety of different products and product categories. And I'm currently the, the senior director of product management for lighting.

So that's been my focus for the [00:01:00] last five years.

**Evan Troxel:** And Michael, give us a little bio on what you've been up to.

**Michael Smith:** Yep. So I actually started my career as a process engineer in the chemical industry. I'm a chemical engineer by training, so working in control rooms, plan automation, uh, and designing, uh, unit operations before then moving into marketing and moving into management over the years to where I've been with Bromack now for over three years.

And really looking forward to seeing now where home automation comes into play, and where the industry's going.

**Evan Troxel:** That's a interesting background. I would've never guessed, you know, that's a, that's an interesting change is can you just kind of allude to how you made that change? Because I think a lot of people in the this industry stay in it like forever. Architects like Cormac and I say, you're gonna die at your drafting table kind of a thing.

Right. So when you make a shift in

**Cormac Phalen:** my retirement

**Evan Troxel:** that's, yeah. That's cor expert. So how, how, how did you decide to make that shift?

**Michael Smith:** Probably early in my career ended up getting pulled into kind of new projects big plan expansions, [00:02:00] then through kind of interest in how the business was run and how we were making business decisions for investments. I got pulled into marketing just in terms of what's a good decision to make in terms of expansions.

And then I got my MBA and started getting into the world of business development and marketing. So it's, uh, kind of was more of an interest in terms of strategy and growth.

**Evan Troxel:** Nice. So you planned this all out a long time ago and it just, it just unfolded exactly like you planned.

**Michael Smith:** just

**Cormac Phalen:** was the baby steps.

**Michael Smith:** Exactly.

**Evan Troxel:** All right, well let's jump into the topic today, which is home automation and the future of it. And there's a lot of residential architects, I'm sure who listen to this show. And home automation is a hot topic in that, I mean, a lot has happened, you know, in the last five or 10 years even, but also. I'm sure a lot of clients are asking about this stuff, and so how do they even keep these architects?

How do we keep our fingers on the pulse of what's happening? [00:03:00] What are the standards? What are the best practices? There's a lot of different things that we can get into today. I'm, I'm wondering, Jeff, if you could just kind of give us kind of an overview of what you've seen in the last five years to kind of get us started in this conversation before we really get into kind of the combination of indoor outdoor home automation and technology.

**Jeff Thomas:** Sure. Yeah, that's a good question and a good topic because as we look at what happens in the market, from our perspective, we're a manufacturer. We sell through custom integrators. And the custom integrators have different approaches. We see some of them. They'll come into a job opportunity, maybe a little late in the game and the whole thing is designed and they'll come in and say, you know, the customer may say, Hey, I decided I wanna put a home theater in.

And they come in and you know, the building is already going on the opportunity to do a lot of do it add a lot of nice things to the home is a little bit behind them because they didn't plan it out ahead of time. We [00:04:00] see a lot we see a lot of motivation from our perspective, and we see some very successful integrators develop relationships with architects and designers to get into those conversations early and they become successful at it. 'cause if they can get in early, they bring a lot together the, for all of the trades that are involved. They can bring, you know, they. They bring the lighting together, they bring all the low voltage together, and they end up managing a lot of that. And then they can also, when in those conversations, those early conversations present all the opportunities to those that are involved in decision making and they can, you know, lay out the whole picture.

Here's the vision of what we can do, and we plan it. Now, we, as integrators, I'm speaking, you know, for integrators, we as integrators can help you along in this whole process because we'll cover this, we'll manage this, we'll do this. If you look at it the other way around, for those that come in late, a lot of times things roll downhill and they'll get [00:05:00] stuck with trying to resolve a problem.

That could have been resolved much easier if there was some planning done from the, by the with the electrician or with the framers or whatever. So involved with architects, having architects understand what's possible with the whole solution. They can then work together to present the customer with all these great options that make their house even nicer.

And ultimately, you want the homeowner to be really happy with the end product. Where if you design all this in and the integrator's very, you know, positioned well to execute and be successful, then everything can come together a lot better than having to having the integrators come in late and just integrate some things here and there and, you know, potentially run into some issues. Experience isn't as great. And you, you may miss out on some of the opportunities that a lot of the new technology can provide that really make your house nice, make your life a little simpler, your house safer, more comfortable, et cetera.

**Evan Troxel:** Can you give some examples of what the kinds of things [00:06:00] are that you're talking about so that Yeah, I mean those, there's a lot of categories, right? In home automation, and I'm sure you guys have a pretty specific focus on that.

**Jeff Thomas:** because I'm in the lighting category. I can give a an example from a lighting perspective. You may bring a lighting designer into a project that says, want these, these recessed cans in these specific locations, because that's where the customer wants artwork.

Or you know, for whatever reason it, there's a specific design done very purposefully by the lighting designer. there's no conversation done on, you may get a joist stuck in the ceiling right where you need to put a light, you may have some framing come together where you can't put a speaker in, and that's really where you're, where you wanted to put that speaker in. These are the types of things that if you plan ahead, you can make sure everything is done just right. Some of those things may not be catastrophic or really impact the experience a lot, but others can. And [00:07:00] so planning everything together, making sure you know where all the wire runs are gonna be making sure you plan out where the equipment is going to be located, all those types of things.

When you plan 'em up front, you can really deliver the best experience.

**Cormac Phalen:** So you're talking about kind of like the ideal situation of new construction where you know you are able to work with the architect, especially if you get there early on that you're able to kind of like coordinate these things so you are missing the joist, you are missing, these things so that you can't have a fully integrated system that you know, kind of gets installed flawlessly. What about retrofitting or renovation work? I mean, are you in that end as well and what are the challenges in that side of the things rather than in new construction?

**Jeff Thomas:** We do make products for retrofit. Also. We see of business going both directions, new construction and retrofit. So we have a lot of. products that are made to offer really the same [00:08:00] experience in a retrofit job. Challenges are a little bit different. You're, you're retrofitting so you probably

**Cormac Phalen:** Yeah.

**Jeff Thomas:** rip out joists and things like that.

**Cormac Phalen:** Right.

**Jeff Thomas:** and in a lot of cases you can, not in all cases, but in a lot of cases you can provide a pretty good experience with a wireless configuration, whether it be wifi for audio streaming or ZigBee. We happen to use ZigBee for all of our lighting control and HVAC control and other controls that are, that, that fit, that, that protocol well. So the challenges from a wireless perspective is really making sure your wireless network, your environment is set up such that you can ha, you can have, you know, really good, clear communication for those wireless protocols so that everything functions seamlessly. And this also take some expertise. network configuration and for anyone that's messed with it

**Cormac Phalen:** Hm.

**Jeff Thomas:** can be a little mysterious, you[00:09:00]

**Cormac Phalen:** Yeah.

**Jeff Thomas:** you swap out an access point or whatever and you know, maybe it, maybe your neighbor put in a new access point and it messes up your house. There are lots of things that can, can affect that installation.

So having integrators come in that have really good equipment, really good training and tools so that they can make sure environment is going to work really well and provide the customer with the seamless experiences very important.

**Evan Troxel:** Can you just speak to kind of the reliability of wired versus wireless really quickly? Because I, I, moving into an, an older house, but not super old, not as old as Cormac house, for example. Right? Like it's, it's a little, it's still the same problem, right? It's like you can't run ethernet cables everywhere after the fact to wire stuff up.

And so,

**Cormac Phalen:** Yeah.

**Evan Troxel:** and, and then wireless, it's like if you really want to count on it, you can't count on wireless, right? You just can't. Sure that it's gonna work a hundred percent of the time. And, and I think this also kind of gets into a question I have about maybe what you guys are doing [00:10:00] differently or similarly to the consumer brand home automation stuff.

A offered by Apple and Google and Amazon as far as kind of like their, their frameworks or their platforms for home automation,

**Jeff Thomas:** Yeah, your first question was about,

**Evan Troxel:** wired versus wireless. Yeah.

**Jeff Thomas:** how well can you do with a wireless Um, you can't control what your neighbor's gonna do. You can't control the wireless environment around you, especially in the 2.4 gigahertz spectrum. So it is a little bit of wild, the wild west. Fortunately, wifi technology has improved quite a bit, and you see con, continually, we see updates with, wifi technology, wifi six, wifi seven, so forth, that that help a lot. They can really help, um, address some of those issues. The, the five gigahertz spectrum that's now available in there, that's available in the newer wifi access points and used in conjunction with 2.4, give you some flexibility there. [00:11:00] But also it means that the density of your access points needs to be a little higher to ensure good communication. So for example, we rolled the clock back when we were really focused on 2.4 gigahertz wifi. You might go into a 4,500 square foot house and put access points in and, and it was great. All the laptops work fine. You really didn't do a lot of audio streaming. here we are where not uncommon to have. You know, tens or 50 or whatever wifi devices connected to a network, and here you are trying to audio to your den so you can listen to music and you can't get it to work.

It's super frustrating. So now you look at modern wifi technology and you have, you have somebody that's really experienced in it. They're gonna come and design a pretty robust wifi network. It may mean that you put four access points in that home and based on the environment, and there are more channels available in five gigahertz, maybe they design five, uh, five gigahertz network that really is going to be robust for you [00:12:00] for your wifi streaming. You know, that's an example of how you can build around it to, you know, it's never gonna be as good as as wired,

**Evan Troxel:** Yeah.

**Jeff Thomas:** you can get, you can get a pretty you, you can build a pretty. Reliable wifi network given the tools, uh, the design tools and the hardware that we have available today. let me talk a little bit about ZigBee.

That's where we, that's the protocol we use for lighting control and for H-V-C-H-V-A-C control and few other types of products. also exists in the 2.4 gigahertz spectrum, so it's in the, it's in the wild west also, however, ZigBee is designed to be low bandwidth, short bursts of control protocol rather than media streaming, data streaming, and the channel width is a lot narrower. You can run into signal interference, but because of the nature of the protocol and how you can configure it and how it's used, and based on our experience of using ZigBee, [00:13:00] we, we've been using ZigBee for 20 years and we started before ZigBee was a standard on an on on, on an early version and proprietary version.

We used it for years. And, um, found that really works quite reliably. And again, you've gotta pay attention to some things. If you've got wifi in the home, which everybody does, then you, you allocate your channels, your ZigBee channels so that you can avoid the wifi interference as best as possible. But like I said, because of the nature of the protocol, we find it very reliable. And, uh,

**Evan Troxel:** Nice.

**Jeff Thomas:** yeah, it works really well,

**Evan Troxel:** And so that, that's kind of operating a little bit differently than the, the consumer brand platforms that are, everybody's buying, you know, smart switches and outlets and devices that, that run on, you know, the different Apple, Google, Amazon ecosystems that are all pretty much competing at the 2.4 gigahertz level.

But ZigBee is kind of like its own slice of that, that, or is it's a different protocol you're saying.

**Jeff Thomas:** It, it, it coexists in [00:14:00] 2.4, but there are products that, uh, for example, Amazon Echo has this, a lot of the Amazon Echo devices. Um. Have they, they have ZigBee in them also. So

**Evan Troxel:** Okay.

**Jeff Thomas:** you can buy, if we, if we ship to talking about consumer grade devices, you can buy them that are wifi. You can, you can buy devices that are wifi.

You can buy devices that are ZigBee. You can buy devices that

**Evan Troxel:** Okay.

**Jeff Thomas:** that are Z-Wave, those are the common protocols that are

**Evan Troxel:** Okay.

**Jeff Thomas:** And they can be all, they can all be configured to work reliably. But again, you've gotta pay attention the, to the environment. Like I said, wifi is subject to a lot more interference. in my experience, it's a little harder to get a wifi, uh, light switch, for example, to work as reliably as a ZigBee or Z-Wave light switch. Um, but there are a lot of 'em out there and a lot of 'em can work really

**Evan Troxel:** Yeah.

**Jeff Thomas:** Z let me talk about Z-Wave for a second. Z-Wave is another very common [00:15:00] control protocol and it. Operates in the 900 megahertz spectrum um, not 900 megahertz. 900. that's right. 900 megahertz. I have to get my numbers correct. and, and there are some advantages of using 900 megahertz. You get a little bit better range and so those devices can work really well. Um, there are systems built around Z-Wave control, light switches, thermostats, just like we use ZigBee. You can, you can very effectively build a Z-Wave network that works really well for control. It doesn't conflict with 2.4. Um, and it's, you know, it's a very complimentary protocol. We actually support Z-Wave as well in our controllers. So if somebody wants to put Z-Wave, light switches or Z-Wave door locks in their system, they can, and we support that and they can work very well as long as you build that network out well.

**Evan Troxel:** I wanted to bring all that up because like we, we got. Super deep, super nerdy there for a minute. And, and the, and the reason that's [00:16:00] important is because there is a lot going on under the surface of quote unquote home automation. Right. And I think a lot of people, architects included, will be like, what do you mean?

Like, I just, we, wifi works for everything we can, we can retrofit, we don't have to coordinate. Like we will just save all that for later. And I think it's just important to point out that there are experts in these areas and they are worth their weight in gold because they are dealing with all of the things that Jeff just talked about and they know it and it's constantly changing and being updated and this is an area that's moving pretty quickly.

So appreciate you kind of laying that out there. But it also kind of illustrates the point that. There, there are consultants directly for this. Like you said, there's integrators, there's Cormac. How many av consultants have you used every project? Right. It's like,

**Cormac Phalen:** project.

**Evan Troxel:** mean, these are commercial projects, but, but for a reason.

Because it's, it's complex and it, and it's not just a simple thing to add on [00:17:00] during a project

**Cormac Phalen:** And honestly, I wouldn't even know where to begin. And

**Evan Troxel:** you don't wanna

**Cormac Phalen:** always, and I don't want to. But I also wanna be able to, you know, you, you said it best, Jeff is you, you, you want to give them, you know, the best possible outcome and you know, so it's finding people that you can work well together with, that they're asking the questions that we don't know what to

**Evan Troxel:** Yeah. And there's enough information here to arm people to start asking questions, but also to say like, we, we've gotta get somebody involved. Most likely.

**Cormac Phalen:** I've gotten over my head,

**Evan Troxel:** Yeah.

**Cormac Phalen:** so let me ask this. So, you know, as Evan said, you all took the deep dirt dive, which is great, but with all of that said, the, the question that I would have and, and I would as, as, you know, a, a consumer as well as a designer, is what is out there available?

I mean, what are you seeing that people are actually, you know, I know Jeff, you were talking specifically about, you know, that you're. Your [00:18:00] forte is, is lighting and, and lighting is a huge, um, you know, part of home automation. But what else are we seeing as this? Like, you know, big umbrella of home automation.

**Jeff Thomas:** Let me start talking about how, how I've seen it evolve over time, how I've seen this, products, these product categories develop. Um. From our perspective, from a Control4 perspective, we started in, like I said, 2000 company founded in 2003, 2004, 2005, we started releasing products. this was before before the Ring Doorbell, before Nest Thermostat.

And so it was a little community that was able to deliver these types of solutions. But these new categories developed, Thermostat comes out and look at us now. Everybody, everybody has a Nest thermostat. Not everybody but ev you know, it's pretty common to have a connected thermostat now and to be able to control it on your app from anywhere. [00:19:00] Um, doorbell cameras are another one. If I would, I would be willing to bet that many, if not most people that are building a new home look at a doorbell camera as one of the things. Well, I want a doorbell camera. Who doesn't want a doorbell camera? They're so handy. You know, I wanna see who's at my front door. I want to know who came to my front door. These, these types of things have really opened the door in this iot world of great experiences that can be offered to customers. Um, but as the market has moved along, you get more and more of these at some point. Now I've got, you know, my thermostat and my doorbell camera and my garage door controller and, you know, a couple of other things in my home might have some audio streaming.

And, now I've got multiple apps on the phone. And, and some people are okay with that and it works fine for them, but at some point you can hit this level of, okay, I've, I'm beyond my [00:20:00] DIY comfort level of installing, or this is a little bit of a pain because none of these things work together. And that's where these integrated systems can come together.

Well, and then we, well, and you know, we talked about the, the big companies like Apple and Google, they're, they're providing these types of experiences and they're great experiences. And, and with the voice integration, you can do some really cool things. But there are a lot of customers who, who look at that and they're overwhelmed by it.

And they, they need some help. They hear about these things, wow, I want a doorbell camera, or, can't believe your lights turn on automatically at sunset. And, you know, these types of things. And they're like, well, I want to do that, but I have no idea where to start. And that's where move from DIY, buying it at Best Buy or Amazon and trying to figure out how to do, to install it yourself to bringing in somebody that can help. Now, you may bring someone in, in a simple way to just install one device for you and [00:21:00] hook up your app, and that's fine. But as, as you roll forward and you want to integrate more and more and more, that's really where. We start to play a role where we can integrate everything. You bring in an integrator that's going to integrate everything, design everything, configure everything, and then provide a really nice cohesive and customized experience for your house. just, just tell me what you want. We'll make it work. And that's one of the beauties of, uh, of this market and the things we do. We've built a platform where our priority is to enable integrators to, to meet the needs of their customers. That's our base level priority. So we've built this platform, it's an open platform.

We design our own products and we, we make sure that they integrate very tightly, but we also are very open in our platform to allow almo just about any, anything that has an API that you can connect to, you can connect to our system. And now you have, have one user interface, whether it be on the mobile app, [00:22:00] a touch screen on your wall, um. Uh, on a, a remote in your hand or, or even a keypad button on the wall, you know you have access to do anything in that system, and it can be customized to the experience you want.

**Evan Troxel:** Nice. Mike, we've kept you waiting long enough. This is one of those things where we, we just go down a rabbit hole and it's hard to get out of. But I appreciate your patience,

**Michael Smith:** is,

**Evan Troxel:** so

**Michael Smith:** love geeking out on this

**Evan Troxel:** I, I'm sure, I'm sure you, I was like, everybody's kind of nodding their head here, so. Yeah. It's all good. Um, well, maybe you can give us kind of a, an overview of what you guys are focusing on from, from where you're coming from with indoor outdoor, this ecosystem that you've created.

And, and as, as more and more people are outfitting their outdoor spaces to be comfortable out there in all seasons. And, and just give us a, an overview on, on what you're doing and what's possible there.

**Michael Smith:** Yeah, definitely. So, uh, from Brom's perspective, right? [00:23:00] We've been working with you guys and really, uh, like living the experience of, of having that indoor outdoor space be, be part of a unified environment that, that customers want. to live in and experience, right? And, and heat brings that comfort, to expand the seasonal use of those kind of spaces.

Um, with that then comes the need to make it easier to control. So it's less of an active involvement to where it's just naturally part of the environment. Um, so the, the comfort solution is always there. Uh, and so we, we launched a new product line of, of IOT devices, smart devices. Uh, we called our affinity line. Um, it gives really kind of a, a, a full blown, uh, solution set, whether it's. basic, you know, I'm using Google Home or I'm using Alexa, integrating with voice Command to be able to turn on and off heaters, you know, to using a, a more sophisticated, our [00:24:00] app to, to do scheduling and scenes, uh, remote access, manage multiple sites, potentially multiple homes or multiple restaurants, uh, to then more integrated solutions worth, you know, integrating into, you know, Control4 system or the like, to make sure that we stay part of the overall environment.

And I think that's the real exciting part about the design space is that not only is it just about having an outdoor space, but now integrating, so the, the home really becomes living a living environment that supports the end user. And as things like the Nest thermostats continue to evolve and they get ai, uh, that really, that integrated experience becomes the, the normal part of the environment. uh, that's kind of where we're at in our journey and, and making sure that, you know, the outdoor heat and and comfort solution is part of that as we continue to grow and evolve.

**Evan Troxel:** What I'm curious about Mike, with these kinds of things is, I know you guys also integrate lighting and heat, and [00:25:00] so there's a kind of a convergence going on, I think, between what you both are doing and the kinds of things that you're dealing with.

And we're, I mean, the thing that kept coming to mind, Jeff, when you were talking was like, especially during new construction, like this stuff, just kind of like, the goal is that it disappears and that you don't see it until you need it. Right? It's like the lights are hidden away and then they start to come on when the sun sets and then like, it just happens and the shades automatically come down when they need to.

And, and it's like this extra layer of, of technology, but it's kind of magical. But it, it's not in your face, right? You don't see. All this stuff at the surface, it just kind of happens in the background. And then when, when I think about heat and I think about ambiance and I start to think about color with lighting, and I think about sound and that sound being, you know, it's the same music playing in this room and outside, and there's no, uh, delay between any of that.

There's, there's nothing that makes me perceive, like I'm hearing this, you know, a skip or anything like that. When I [00:26:00] walk from one space to another, it's this kind of, ecosystem's a word, right? But it's like this whole ambiance that brings things together. So, Mike, can you talk about just kind of what Brom has been doing to, I mean, start, like I said, converge these different things and, but also like they're really elegant.

They also kind of disappear and, and that's I think what's, what could be the most interesting thing to the audience who's listening, who are designing spaces that are gonna integrate these technologies?

**Michael Smith:** Yeah, absolutely. So, uh, I, I think bro's approach has always been, uh, solution oriented, right? So rather than, you know, play to an industrial product into a home environment, we design the product to suit the space and the aesthetic, so that it is seamless into the, um, the space that, that someone's trying to create.

Whether that's been an architect or. design builder or, or contractor with a home homeowner. Uh, and then with that, then the controls are just a [00:27:00] natural extension to make it easier to have that level of, of comfort in knowing that you can turn them off when on and off whenever you want, wherever you are, uh, rather than, you know, driving away from the house and you go, did I remember to turn that off? You know, you know, which is, is, is a big concern when

**Evan Troxel:** Uh,

**Michael Smith:** about a six kilowatt heater

**Evan Troxel:** yep.

**Michael Smith:** uh, you know, that's a lot of energy. And so putting that peace of mind is part of the overall solution set that we're after and that we'll continue to invest in and, and evolve over time.

**Evan Troxel:** Nice. Nice. Go for it. Who was gonna say something there? All right.

**Cormac Phalen:** I was

**Evan Troxel:** I hear. Okay.

**Cormac Phalen:** a question, so. You know, we were, because Jeff, I mean, sorry, Mike, you, you kind of brought up a, a, a, a concern, um, that a lot of people have, especially, you know, when designers are, you know, center saying, oh, and you can, you know, automate your home this way and you can add this to it and this to it, this to it.

And then people start to see dollar size, like, oh my gosh, this is going to, [00:28:00] know, add to my electric bill and things like that. And so, you know, I'm, I'm, I want to ask this question to both of you. It's, how has the new technologies in home automation and the products that you sell and the integrations that you do actually helped manage like energy use, um, and energy consumption in that so that, you know, you aren't feeling, you know, yes, you are being able to like fully integrate as Evan saying, you know, like create this ambiance and this, you know, kinda like seamless integration of all of these different, um, you know, add-ons to the system.

But like, how does it also help manage, you know, electric consumption?

**Michael Smith:** Yeah, I, I think from our side it's, it's, uh, pretty straightforward, um, and a lot of flexibility in how apps function, uh, to be able to set timers and, and schedules to say, okay, I wanna make sure the system always shuts off after 10:00 PM. Um, or, you know, uh, doesn't start before 6:00 PM to, for the dinner crowd or, or for my evening meal. [00:29:00] Um, to, um, then also then, uh, having, uh, the remote access to say, okay, let's make sure the, the person that's at my Airbnb, uh, has that turned off, uh, when they leave. Um, all those things give the, the potential peace of mind to reduce, uh, potential for waste, um, and to make sure that it's being used seasonally appropriate.

Meaning you're not turning this on during the middle of the summer,

**Evan Troxel:** Hmm.

**Michael Smith:** so you can have that override in your schedule to say, Nope, it's locked out.

**Jeff Thomas:** from my perspective, looking at, at a, looking at this as a, as an energy savings opportunity at a systems level, I think about configuring everything. To be one action touch of a button, a vacation mode or in a commercial environment, an off mode. And behind that button you can really do anything you want. You may have solar panels and batteries, and you may [00:30:00] have additional feedback coming into your system that the power's out or the battery's low or whatever, that, and you can have a different profile for that environment, or you can have, know, a different profile for vacation mode or off mode or whatever.

If, if I get specific to describe an example, let's say you've got bro heaters and you've got, uh, you know, you, you just had a party and you, you hit goodnight. And goodnight is going to ensure that those heaters shut off along with everything else in your system that you wanna make sure that you control and turn off to manage the energy that's going on. And, and that can all be configurable. In addition to that, you can set alerts. You may have something set up like a. Uh, a current monitor to make sure that those heaters as to, as a, as like a double check aren't drawing any power. And if they are after they've been turned off, or while your, your home is in vacation mode, then you can receive an alert and then you [00:31:00] have remote access.

You can go in and, and make sure that you shut them off. So the system provides all that flexibility to provide you with a simple example, to really configure anything, any element of your system in this off mode or goodnight mode or vacation mode. And then you have the ability to connect remotely and manually manage any of that, as well as getting alerts if you have sort of anomaly go on. So it really gives you the control and convenience of all of that.

**Evan Troxel:** Jeff, can you talk about some of the latest stuff that you guys have come out that kind of combines lighting and sound? It sounds like there's some pretty interesting products that are, that are pretty fresh.

**Jeff Thomas:** Yeah, we released, uh, a pretty interesting, really cool, um, lighting and sound product. It's called Episode Radiance, it's a sound system that's designed to be used outdoors that provides both sound and audio, and it, it runs over the typical outdoor lighting to conductor wire, uh, burial wire. [00:32:00] So an installation perspective, it's easy, for a landscaper who's used to running outdoor lighting wire to run the wire an integrator's perspective, can connect it to the, the amplifiers just like they would connect any other amplifier.

And then from an experience perspective, you have the flexibility of providing both audio and lighting all throughout your, your, your landscape in your home, wherever you want. that all integrates into the control system. So now. We talked about having audio playing in the home as and outside, Now you could click your party mode button and the lights on outside come on. the, uh, the audio plays in the, the, in the, you know, the, the, the rec room or whatever where you have the pool table and the bar and so forth. And when you walk out the back door into the backyard, it's seamless 'cause the same audio is playing.

And this can be done with a push of [00:33:00] one button.

**Evan Troxel:** Nice.

**Jeff Thomas:** so all that can come together really nicely. You can have the same for your outdoor TV and your indoor tv. You have a game playing and you can have that playing inside and outside. And that can be seamless as well. So it all can be configured very easily and really whatever configuration the customer desires.

**Evan Troxel:** That's really cool. So you don't actually have to lay conduit and go through all of that expense with a system like that. You can, like you said, you could just do buried two wire and, and get that kind of functionality and it's pretty simple.

**Jeff Thomas:** That's exactly

**Evan Troxel:** Very cool.

**Jeff Thomas:** Yeah. It's a, it's a, it's a very unique product. It's, um, I'm, I'm not aware of anything like it on the market, and it really provides that combined lighting audio experience with an easy installation. It's, it's really a, a really great product.

**Evan Troxel:** And it's not wireless. Let's go back to that.

**Jeff Thomas:** And it's not wireless. That's right.

**Evan Troxel:** Michael, what about you guys? What have you guys, uh, released recently that the audience should be aware of?

**Michael Smith:** the [00:34:00] affinity controllers are our newest launch, uh, which really gets us into the iot space. Uh, really, uh, in terms of voice control commands, integration with Google and Alexa. Um, it's, it's been a major product launch for us, uh, so far, uh, this year, and it's been well received by the market. Um, and then, uh, from there it's just continuing to evolve the heater spectrum to build the outdoor comfort space.

**Evan Troxel:** Nice.

**Cormac Phalen:** and teaching corn a little bit that the fact that, like you, you'd kind of talked about the eclipse and, and like just the aspect of heaters. know, integrating lights, integrating other things into, something that, for residential, are looking at a different way of being, more aesthetic way to provide heat and that outdoor comfort that extending that outdoor living in a much nicer way than, the old box heater.

**Michael Smith:** Right, exactly. Really make an inviting space [00:35:00] that people want to be in that, uh, doesn't look like it's being forced into the space. Um, similar with our recess kits that we've come out with that make it easier to recess the platinum lines, you know, just they're not, you know, unique in themselves, but in combination really gives, uh, designers a huge degree of flexibility in how they incorporate comfort into the outdoor space.

**Evan Troxel:** One of the things that, you guys both mentioned is just kind of this ability to control things remotely. So like there's a risk part of that, right? Oh, did I leave the heater on? Did is the garage door still open? Like, what? What's going on in the house? And you have a way to like use your device, right?

Pull up an app and you can see what's going on. But I, you know, I think we've all felt this over the years, right? More and more apps to control things. So I've got the. This app for these iot devices. I've got another app for the vacuum. I've got another app for the sound system. I've got another app, but, but it seems to me like the voice assistant [00:36:00] stuff is kind of a great equalizer.

At least maybe not a hundred percent of everything. Right. But I'm just curious from, from both of your points of view, is that a trend that you're seeing as well, where there's kind of this ability to control things with your voice? Or maybe there's just some, some home assistance, you know, not home assistance, but devices throughout the house that you can just talk to and, and control just about everything now?

Is that really kind of where it's come to

**Jeff Thomas:** Yeah, in our experience with voice control, uh, it is certainly evolving. It's certainly getting better. Um, look at what you can do with a TV remote to search for to

**Evan Troxel:** and not type it in?

**Cormac Phalen:** Yeah.

**Jeff Thomas:** Yeah, I mean, that's, that's a

**Cormac Phalen:** Yeah.

**Jeff Thomas:** experience. It's a great application for voice. Um, I, I reflect back on my own experience when I, I connected one light in my living room, had it controlled over Alexa, and it was awesome because I would just say, [00:37:00] Alexa, turn on the

**Evan Troxel:** Mm-hmm.

**Jeff Thomas:** and they would turn on. And then I connected a whole bunch of lights and I found myself saying, uh, what did I

**Evan Troxel:** Totally

**Jeff Thomas:** that I want to turn on? And, and the

**Cormac Phalen:** Yeah.

**Jeff Thomas:** kind of starts

**Evan Troxel:** uhhuh.

**Jeff Thomas:** fall apart. In fact, at that point, my family stopped using it at all, and they were using it before when it, it was really easy just to say, turn on the lights. Um, there are things that are happening in voice control that are improving that, uh, we see that from multiple, uh. vendors of voice control. We recently introduced, some new functionality where we, where we can have pretty tight, uh, apple Home integration and that helps address some of those issues and gives a little bit more native speaking capabilities.

So that will continue to improve and it will address, I'm, I'm certain it will address, um, these types of experiences and make them smooth, make them, you know, room specific type experiences, [00:38:00] make them work better. So I, I'm confident that will evolve and continue to improve. Yet there are still other experiences that are where I think, we'll continue to, I mean, I'm not, I don't wanna sit and say volume up,

**Evan Troxel:** Mm-hmm. Right.

**Jeff Thomas:** volume up.

**Evan Troxel:** Totally.

**Jeff Thomas:** things that's, that's a basic example, but there are other experiences around the home that are more naturally suited for other, other user interfaces. Um. But we, we believe voice will continue to play a significant role and, uh, you know, it'll evolve and get better and better, and

we'll continue to invest in

**Evan Troxel:** I, I think it's important because you, you, you brought up an important point, which is like the, the home app, right? The on Apple devices and, and there's, Google's got their version and Amazon, Alexa's got their version, but it really does help kind of pull lots of things into one place, so I don't have to go to all those separate apps.

And then you can start to set up, you know, scenes that, that combine groups of items so that they all turn on or turn off together. [00:39:00] Uh, and then you can set up automations in there, you know, so like, like we have one in the wintertime that we use for. Christmas lights. Right? Those come on automatically at a certain time every day.

Or, or in our, our orchard, my wife has very tiny trees that need heaters on, in, in the, she has these little heating pads in the winter, and it's like when it drops below 36 degrees, turn those on, or the trees are gonna die. Right? And, and that's, that's really amazing stuff. But, but I always still kind of have this reservation in the back of my head, which is like, did it turn on?

Did it turn off? Did it do these things? And so a lot of times we still are kind of at the point where we have to double check these things because at least in my experience with like Apple's home app, it, the automations don't always work. And, and it's not life or death, but it, it is inconvenient. And then you have to troubleshoot it.

And I think these are all things that architects need to keep in mind when they're specifying things like these. I am not talking about the, the pro grade stuff that you're talking about, but I'm talking about just like the consumer grade stuff. It definitely still has some bugs in [00:40:00] the system and it's kind of frustrating and, and I'm a techie guy and I, and it, I still ram my head against the wall sometimes on it because it's just like throws you for a loop.

**Michael Smith:** I think the, the technology is definitely going to evolve quite a bit. I think, uh, we've, we've been surprised with voice. It looks like about 30% of our users are using voice controls. Um, I think it does kind of wear on you because it's still a little stagnant in development. think as things like the, the gen four kind of nest controls, the learning thermostats and things like that, that Google's investing in as they get AI and you get better language models built into these systems where you, they're more conversational. I think that's where you'll see the next inflection point in terms of end users and then in terms of things more advanced, um, digital integrations rather than just analog connections on, on or off, where you're actually getting more realistic feedback loop into the system. They know, oh, it didn't run because the water valve didn't [00:41:00] turn on or it didn't run because, you know, somebody unplugged the, the Christmas lights.

Right? So that there's a feedback loop into the system. That's where we will really simplify the end user experience. It's, it's not there yet, but the investment in the growth rates will, will definitely bring it there. I dunno. Jeff, if you have similar thoughts from what you've seen side.

**Jeff Thomas:** as you were describing that, I, I thought of this fatigue factor that you can see happen. Um, people hear of something or they buy a new gadget and they install it. And, and when you use it, if, if you can get past about four weeks and it becomes part of your lifestyle, your, your golden, but what happens to a lot of these, it only takes a little, just a little bit of fatigue for you to burn out on it after three or four weeks, and then it goes away.

And that's, you know, I described my experience with voice. And, and expanding lighting control. And I introduced that fatigue factor and my family [00:42:00] fell off that so fast. Like it's just a, it's just enough that I'm not gonna do it anymore. And, know, there are other ways to do that and I don't wanna deal with it.

'cause it doesn't always work. You know, that's one thing about automation, it's gotta always work the way you want it. And if it doesn't, then the frustration level goes high. You know, let me tell you about your thermostat not working or your lights not turning on. These are,

**Michael Smith:** Big

**Jeff Thomas:** know, not, not streaming audio is one thing, but some of these things are mission critical for the

**Evan Troxel:** Mm-hmm.

**Jeff Thomas:** and, um, and they've gotta be simple.

And so, know, like I said, we'll, we'll see voice continue to evolve and it needs to reach that point it doesn't introduce fatigue. Just that little bit of fatigue that drives, drives you away from using it.

**Cormac Phalen:** let me ask this question, and this is more of, I guess, maybe you would give designers when they're, looking into doing home integration, like a fully integrated type system that, as [00:43:00] you said, is evolving and will be changing. So what, designers and, and I guess designers as they're talking to consumers. Need to know about kind of like, you know, evolving, this evolving ecosystem of like, what do we need to know about, like, you know, alright, understand that, this is the kind of infrastructure that you should put in because it is something that's flexible enough to adapt to future changes that we see coming down the road and things like that.

**Jeff Thomas:** You use the term infrastructure and, and, uh, we talked a little bit about networking before, and that is the basis you know, what I would recommend to anybody building a home, even if they weren't going to initially plan on installing any, any of these connected devices. Wire your house, wire it up for the network.

And I think that's pretty commonly that's,

**Cormac Phalen:** Hmm.

**Jeff Thomas:** well understood these days. But you've gotta have that in place. 'cause that gives you a lot of flexibility. So after you make sure you have a, a good solid network or [00:44:00] communication infrastructure and environment built out that will enable you to adapt to other devices, then I think from a design perspective, you really need to understand what's possible. Um, the, the common devices out there that I think most people, or many people understand well are thermostats, doorbell, cameras, door locks.

These provide a great experience. There's a lot of value in these things, but as homes get larger and as people want to do different things in their home, they, they, they can add at other, other experiences. cameras all around the house can be very valuable. A camera in the garage, for example, to see what cars are in the garage when you're outta town, that can be very valuable. Um, your lights coming on outside automatically and making your house look occupied when you're not there. These, this kind of an experience is great. We talked about integrating audio outside and inside, so it's seamless. Um, designers understand all of these things. It's hard to understand everything, but that's [00:45:00] out there.

But have a good comprehensive understanding of what's possible. I like to say with our system that the platform that we've built, you can. You can integrate just about anything that has an a PII can integrate my pool controller. I can automatically shut it when I hit my Goodnight button. I, I can automatically turn off the spa, I can do all kinds.

It's, it's amazing what our integrators do with, with our system because it is an open platform. So understanding that you have that flexibility to provide a, a pretty broad spectrum of, of experiences for your customer based on their needs, uh, will help you understand what, what's possible and what you can offer. Recognize license plates when they pull up to the gate, that license plate is, my husband, I'm gonna open up, or my mom, I'm gonna open up automatically, or it's unrecognized, so send me a picture of it in a notification so I know who it is. You know, all these kinds of things are possible.

**Evan Troxel:** Mike, you guys have an app, right? For the controls of, of [00:46:00] what you're doing with the heaters. Can you talk about the kinds of things that you can do with that? I mean, o obviously it's got on and off and you can set the temperature, but, but like how, how far are you able to go nowadays with, with the modern tech?

**Michael Smith:** you go pretty far with it. I, I think, uh, starting with able to manage multiple sites, so if you own multiple homes, you know, a vacation house or, or summer home, or if you have multiple Airbnbs or multiple apartments, uh, to be able to, to manage them separately, to then within each, uh, home or or restaurant, being able to set up zones of heaters to say, okay, this is the pergola, this is the patio. To be able to bring that all together. And then with that, then set up scenes for what, you know, say maybe your, your lunch hour or your, your evening hour of operation, or you know, when, when you're gonna have your morning coffee, you know, outside by the pool. to have everything set up and ready to go when you, when you go out there [00:47:00] to, to enjoy your cup of Joe in the morning. Um, and then, uh, from there, being able to set in those safety things of, oh, I only want it to run for an hour. Um, you know, 'cause I don't want to think about it when I step out of the jacuzzi. I just want to go inside,

**Evan Troxel:** Yep.

**Michael Smith:** Um, so we thought about a lot. We still have, I'm sure lots to learn as, as the technology evolves and, and we get more and more feedback from how customers want to use the products in different ways.

**Evan Troxel:** The cool thing about that though is that, that the app is just like a new version comes out and it has new functionality and it just gives the end user more control over the devices they already have. I think that's absolutely fantastic to get like those quote unquote over the air updates and, and be able to do new things and, and I think I love that about it.

Yeah.

**Michael Smith:** Yeah, it's definitely a, a nice feature to be able to do and, and offer new solutions to, to customers as, as we develop them.

**Evan Troxel:** Jeff, I, I assume it's the same with with lighting and probably sound too, but maybe you can give an idea of, of the [00:48:00] kinds of controls that your customers ultimately have over those kinds of devices.

**Jeff Thomas:** Yeah, we, we have pretty broad control over lighting and, and what the keypads can enable you to do, like I alluded to a little earlier, is to set a keypad button to do anything. So got lighting control, both wired and wireless lighting control. That gives you pretty broad compatibility over control in just about any type of light load and, and non lighting loads.

We can control fans and, and. And heaters, and I know the Brahmic heaters, some are zero to 10 volt control, a lot of 'em. And we have zero to 10 volt control built into our lighting as well. So those experiences are provided. We also introduced a few years ago, RGB Control, and this is, uh, an area of control that really provides great experiences.

I remember when I was thinking about it originally, I like, why would I want an RGB light in my house? Or, this is kind of weird, [00:49:00] it's, it's like, makes me feel like I'm, it's kind of gimmicky and I don't want that. And, but now what we're seeing is will create an accent wall and put a color on it and it's really purposeful and it can really be done beautifully.

And so there are some really nice applications of RGB lighting that can be used interior inside and outside. I, I had an experience with some outdoor lighting. Uh, mostly because of my ignorance. As it started, we started selling a, a great outdoor product line called FX luminaire. And I got a system and was able to, to put it in and, and test it as we developed the driver for it. And they asked me, do you want RGB lights or do you want just just white or, or white with, uh, you know, tunable white lights? And I said, well, I don't know. What should I get? And they said, oh, get rrg B. And I thought, well, what the heck? I don't know if I'll ever use it, but maybe I'll use it for holidays. So I put RGB lights around my hou around my yard and I shine 'em up on different trees.

And Wow, [00:50:00] putting, putting landscape lighting in on your house is so awesome. It makes your house look

**Cormac Phalen:** Okay.

**Jeff Thomas:** at night.

**Evan Troxel:** It just looks like way more expensive all of a sudden, right? It's like, Ooh, this is so nice. Yeah,

**Jeff Thomas:** It's amazing, and, and maybe this is just coincidence, but since then I've noticed several of my neighbors put up outdoor lighting.

**Evan Troxel:** it's contagious.

**Jeff Thomas:** in that, um, I, I should have talked to the FX Luminaire folks a little more before, but I started playing with it. And as I played with the colors, we have a, little, um, Japanese maple tree by our front door. And as I was playing with colors, I turned it to red and I thought, wow, this little Japanese maple tree just really lights up. It looks like it's on fire. It's beautiful if I put that as red. And I started tinkering with it and I found that, oh, you just put it slightly red.

So, so the, I mean, if you put it really red, then, then you know it's by the front of the house. It makes the front of the house kind of red. But if you just put it slightly red, it still makes the leaves really pop. And I then I went over to one of my crab apple trees and I did [00:51:00] the same thing. I just

**Cormac Phalen:** Thanks.

**Jeff Thomas:** red and I thought, wow, this looks great. Then I went over to one of my pine trees and I moved it slightly green. you can imagine this. This look of, of shining a bunch of white light on these trees and it looked great compared to putting just a little bit of color in there. And all of a sudden, I mean, you don't notice that there's color in the lighting, but you just notice the colors of the

**Evan Troxel:** Mm. Mm-hmm.

**Jeff Thomas:** it looks beautiful.

And I mentioned it to the FX Luminaire guys, and they're like, well, yeah, you, you should have asked us about that. That's what we recommend. And um, you know, it's, it's, it's one of those elements that of, of, really beauty in making. Making your system be really, you know, do exactly what you want, make your house look nicer. And, and now we have control, you know, all of that control is in our, in our system and in our application. I can go out in my front yard, I can set all my lights to a new color scheme, whatever for my football team or whatever. I can save that scene. And on my app I can [00:52:00] say, you know, have that come on automatically tonight.

And, and all of this can be done by me, by me as the homeowner, not the integrator. And so we've opened up the capability not only to control colored lighting, but we, we, the RGB lighting, but to given the customer some capabilities. I mean, on top of that, if you've ever, if you haven't ever lived with tunable white lighting, and you do it, you put it on what a lot, a lot of people are calling the circadian lighting this, the scheduled lighting where the color temperature changes throughout the day. This is an incredible experience. You know, I like to say you go into Home Depot and you buy a light bulb today, you choose a color temperature, and guess what? You're gonna be

**Evan Troxel:** Yep.

**Jeff Thomas:** every time because you put it in, you think it looks great, and then it gets dark and oh man, it looks bad now. Or vice versa. But this, this, this tunable white lighting and, and our system and other systems provide this as well. You, you put it in and, and you, you, you know, you know those lights are capable of that and you set it automatically to change throughout the [00:53:00] day. And it is an incredible experience to provide nice, bright lighting.

It just feels like you have more windows in the room. Great experience. I think that one is, that's something that we'll see a lot more on the, on the inside of homes and, uh, this RGB lighting and like we said, the landscape lighting can really make your yard incredible.

**Evan Troxel:** That's cool. Cormac, I have an idea for you. You, you've gotta, you've gotta automate it now so that, that it pulls in the football schedule so that when your lions are playing or when Auburn's playing, it automatically swaps the color of the lights out front so everybody on the block knows it's game night.

**Cormac Phalen:** And, and, yeah, exactly.

**Jeff Thomas:** Yeah, our neighbors are fans of our biggest rival, so just to stick it to 'em when they're playing. I put our team colors out.

**Cormac Phalen:** There you go. See.

**Evan Troxel:** See it's your own version of sports right there in your front yard.

**Jeff Thomas:** That's right.

**Michael Smith:** you.

**Evan Troxel:** That's That's awesome.

**Jeff Thomas:** It's fun. It's fun Rivalry.

**Evan Troxel:** I'm glad you brought up Jeff, this, this thing about, well, well, you should have asked, right?

Like your guys said you should have asked. Uh, and it's like, well, how would I [00:54:00] have known to even ask? And so I think, you know, for an audience of architects who are listening to this and they're hearing a lot of this stuff for the first time, and of course nobody's gonna remember all of it. And of course it'll be different when their clients get their hands on something.

But this all goes back to kind of like, where's the best place to get this information? And, and I think the best question to always ask in the very beginning is like, tell me what I don't know, like, what questions should I be asking you because you. Both have your fingers on the pulse of your categories, right, of not only your products, but your categories.

And I find that it is absolutely the best mindset to go in as the architect and say, tell me what I don't know, because I can't know everything about everything. And so it sounds like you guys both have those resources available to architects and designers out there. So Mike, can you talk about Bromic's and then Jeff will pass it over to you.

**Michael Smith:** Yeah, we have a, a design team here that supports, uh, you know, architects and [00:55:00] designers in terms of how to incorporate outdoor heat and how to then enable controls, like to ask the questions of how do they plan on using this space, you know, what's the, the main uses of these areas and who's gonna be using them to then be able to talk through different control solutions, uh, as well as then help lay out the heaters to make sure they have optimal coverage of the areas for, for maximum comfort.

So we're all here to help and, you know, there to, to help in that journey and understanding what's the best way to, to bring comfort to the outdoor space.

**Jeff Thomas:** And we continually build on our, our training resources from a manufacturer's perspective. We, we train our internal sales team, our sales engineers that are in field, in the field, and our sales reps that are out there in the field helping support all of the, the dealers and integrators that purchase product from us.

And I would say to a, to a, an architect to really help [00:56:00] know what's possible is to with one of the integrators, uh, an integrator that's already involved in the, in the build or an integrator that you know, or the one that is local. Um, our local. Control4 sales reps also would be happy to entertain that conversation and sales reps or sales engineers and, um, they can come in and have that conversation to really help you understand and have a two-way conversation.

Really trying to understand what, what you as an architect are trying to deliver, what the homeowner is looking for, and then what's possible from a, from a, a smart living experience perspective,

**Evan Troxel:** Hmm.

**Jeff Thomas:** um, bringing those people together and having those conversations is very valuable. And like you said earlier, like we talked about earlier, this, this market continues to move and there there will continue to be more and more experiences.

So this isn't a one time conversation, but um, you know, getting together, we, we encourage our integrators, connect with architects, get [00:57:00] upstream in the project build and the design conversation earlier and everything works out better and with, with interest coming. Coming from the architects down also to, into the integrators.

You know, combining those, those two efforts, putting them together and having those conversations is the best way to

**Evan Troxel:** Nice. I guess final question then for, for both of you. We'll start with you, Michael. What, what are you excited about with the latest technological advances that you've been seeing

**Michael Smith:** Uh, how I'm nowhere near done, uh, exploring the, the opportunities we have for our new affinity controllers, uh, in terms of helping people understand the, all the different, uh, options that, uh, they enable. and then, uh, down the line, we've got, uh, new updates to our products to really improve the aesthetics, whether it's our, our leading platinum series or our clips line to expand that out of the overall solutions, uh, for, for the outdoors.

**Evan Troxel:** Nice, Jeff.

**Jeff Thomas:** We, we [00:58:00] continue to iterate on all of our products. Um. Some of the changes are, small incremental changes, some of our larger, more innovative changes, and, and, uh, they, they're applied across the spectrum of all of our different products. Um, one question that may come to mind is, what about AI in all this? How is that going to impact what we do? Um, a user's perspective, from a homeowner's perspective and how they use their home? You might think, well, I can just use AI and it's gonna make a lot of decisions for me and make it a lot easier. And there are some cases where, where we could say, we could have the app say, Hey, we notice you do this every night.

We notice as you're going to bed, you, Turn off the hallway, like you want us to do that automatically. And there are those types of experiences that we can enable. But as we go down that path from a user's pers from a homeowner's [00:59:00] perspective, you have to be careful about how we, how you apply that. You look at walking in the laundry room, every time I walk in the laundry room, I want the lights to come on. Let's just use that as an example. I know that every time I walk in the laundry room, I want the lights on. if the lights, you know, there, there are no cases 'cause it doesn't have windows, I want the lights to come on. But if I configure theater To, to turn the lights slightly on. Every time I press pause, that may sound great. I'm, I'm gonna press pause. I want the lights to come on because I'm gonna go answer the door, or I'm gonna go get the popcorn. Those, those types of things may happen, and you might think, I always want that, but the first time you watch a movie and you press pause because of some other thing, and you don't want the lights to come on, the lights come on and you're like, oh, I hate that.

I don't want that. And so you have to be careful as you go down this path of making sure that you only the things that you know you want every time. [01:00:00] And there's a line there between that's so great. The system does it for me, like turning on my outdoor lights. I want that every night. It's awesome.

I never have to think about it again. Versus some of these other experiences where, you know, we're, we're creatures of habit, but we don't follow the exact same pattern all the time. And the second you're out of that pattern and you want to do something and your system's doing something else, it's very, very

**Evan Troxel:** Yeah.

**Jeff Thomas:** So you have to, we have to be careful about where we, where we apply AI and how much we apply it so that we can, you don't want to get in the way, you don't want to make creative a frustrating experience. So that from a homeowner's perspective is we're going to see improvements there and there'll be, there'll be great improvements, but there's a line there you have to be careful of. From an integrator's perspective, there are a lot of things that we can, we can use AI in to make, the integration life simpler. There may be configuration tasks that they think, oh man, I don't wanna have to do that. 'cause every time I have to do that, it takes me 45 minutes because why don't we apply AI to that [01:01:00] configuration? you know, those types of things that seem tedious are often good targets for, for some AI to take care of. So there are, there are areas like that from the integration perspective, even even design from an integration perspective, uh, we can use AI to really help help. that process. so it's a, it is a buzzword to some degree, but, uh, I expect to see it applied more both from a, from the homeowner experience side as well as from the integrators experience side to help improve things that we're doing.

**Evan Troxel:** Fantastic. Well, thank you both for teaching us today about the future of home automation. And I, you know, like I said in the beginning, I know there's a lot of residential architectural designers and architects doing work, and this is one of those layers that's becoming more and more asked for by clients, right?

Because of the conveniences that it affords and kind of the excitement that it, that it could bring. but of course, we're balancing that with some real world talk here of, of the things to look out for, the frustrations that exist. [01:02:00] And, you know, this, these are all things to keep in mind as we're talking with our clients about integrating these new technologies into our projects and into their.

New upcoming houses, right? So they've gotta live with it. so that's gonna be a whole other level from, from us, just specifying things. we'll have links to the resources that you both offer in the show notes for this episode. And until next time.

**Michael Smith:** Thank you guys.

**Cormac Phalen:** Thank you very much.

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