



Channel Mastery Podcast, Episode #60: Kristin Carpenter-Ogden Interviews
Greg Carter, SVP of Connected Buildings Software Acuity Brands, Inc.

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- Kristin: [01:32](#) Welcome everybody to episode 78 [sic...79] of the Channel Mastery Podcast. I am so excited to share my guest with you today. We have Greg Carter in the house, who is the Senior VP of Connected Buildings Software at Acuity Brands. Welcome Greg. It's great to have you here.
- Greg Carter: [01:59](#) Oh, thanks. It's great to be here.
- Kristin: [02:01](#) And I appreciate you joining us during such a busy time, because I know we have a lot of big trade shows on the horizon for you, but can you tell my audience what Acuity Brands does? We're going to get into connected buildings and all kinds of amazing technology today that's going to be impacting what your customer is going to be expecting from you when they interact with your brand or your retail storefront.
- Greg Carter: [02:24](#) Sure, that sounds great. Acuity Brands, although most of your listeners probably haven't heard of us, we are actually the largest lighting company in North America. The reason that people don't know about us is because we sell mostly through commercial distribution channels, and we sell through our individual brands. The one that's people may know about, Lithonia Lighting is carried at Home Depot and Lowe's and other places that some people might shop, but most of them are

being sold to electrical contractors for use in larger commercial buildings.

- Greg Carter: [02:59](#) It may be a little bit of a surprise for your listeners to hear that we're in the IoT and digital transformation game, but it's actually a really interesting play. I actually came to Acuity a few years ago from Cisco Systems, where I ran the IoT services business for Cisco for about five years.
- Greg Carter: [03:21](#) One of the things we were always challenged with as we were trying to create that category and connect up all these unconnected devices is that in order for a customer to go and pursue that kind of a digital strategy, their first step is to have to put in a communication infrastructure that let's them connect all these new sensors and devices.
- Greg Carter: [03:41](#) That communication infrastructure can be very expensive, and you've got to do that before you've even started to experiment with the data that's now revealed from those devices, and figure out how it's going to benefit your business. I was really attracted to what Acuity was experimenting with at the time, which was to say, if you want to put in a really dense network that's going to be able to connect to sensors and people, all over an indoor space, you can either go build that or you can look at what already exists in the building.
- Greg Carter: [04:12](#) If you look up, you'll see that there's a natural grid of digital nodes that is sitting overhead and that's the lighting. As lights have moved from analog to digital, to LED technology, and more and more lighting control systems are getting deployed, which creates a digital network that connects those nodes, and then sensors are being deployed. Initially things like light level sensors and occupancy sensors to support lighting control, you now have the beginnings of a really powerful, dense, and ubiquitous IoT network.
- Greg Carter: [04:43](#) What we've done at Acuity is we've put a few more bits of technology into all these lights, specifically a Bluetooth radio and a digital driver, and it allows us to create that network that we can use those lights as a beacons and create effectively an indoor GPS system that can allow us to create personal navigation tools, so we can enable applications on mobile devices that now know where you are and can help guide you to things you're looking for, like a product.
- Greg Carter: [05:14](#) When you do a product search, you can now have it plotted it on a map, and give you turn by turn directions to get to that product. Or, if you need to get help from an associate, you can

now put out a call for help and they can come find you. Then, there's a whole bunch of things that can be done on more of an employee efficiency side of the business, so things like the trends of buy online, pickup in store.

- Greg Carter: [05:35](#) Or, the associates can go ahead and load up a shopping list and have it laid out on a map and be guided on the optimal route to go pick the order and reduce the time it takes to do those kinds of things. Those are just some examples on the navigation side. We also have enabled the ability to track assets, so putting Bluetooth enabled asset tags on things like shopping carts or on restocking tugs to be able to improve the workforce efficiency, to be able to get better marketing analytics about how people are moving through space.
- Greg Carter: [06:12](#) You can do some really interesting things as you start tracking all the shopping carts that move through a store, or tracking people or employees, and you can start to understand how you can better design the store and better layouts, better layout marketing displays to improve the behavior that you want to see out of the consumers that are moving through your space.
- Kristin: [06:33](#) So that's a lot. I have to pause for one second. There's so much there that I want to touch on before we move onto, because there are many, many facets to this and we have a lot of things to cover. But let's reel this back in. You mentioned a few things that I think, I almost feel like there are two areas of focus here. One is again, on that digital GPS, and this is something I want to just emphasize to the crew here on Channel Mastery, your consumer is equipped with everything they need to participate in this.
- Kristin: [07:04](#) Even if you feel like, "That feels like it's way out there to me, I can't imagine looking up" ... A lot of our awesome audience will look up at their ceiling and see a bunch of tents, okay?
- Greg Carter: [07:14](#) Right.
- Kristin: [07:15](#) That's where they display them 'cause there's no other place. It's awesome, but at the same time, no matter if you own your building or you're renting a building, you have the capability of deploying this technology and keep in mind that your consumers are going to be expecting a high touch experience driven by the data that's mined from it.
- Kristin: [07:34](#) That is a really big leap for a lot of us, and it also, there might be some obstacles in the minds of the brands and retailers that comprise my specialty audience, but let's take a few steps back.

Where would you start with maybe a specialty brand or retailer that has not embraced this yet? What are the first few steps that we want to go into? And then of course, I want to get into some of the award winning technology that you have, et cetera.

- Greg Carter: [08:00](#) Yeah, I think the first thing is understanding what you're trying to accomplish, right? Understanding what some of the larger retailers who've been investing in these kinds of technologies for years, why did they do that? Why did they put beacons in the store? Some of the example use cases would be to be able to wake up a cellphone and send a message to a consumer when they get near something, something that you want to tell them about.
- Greg Carter: [08:25](#) That's a very simple type beacon use case. Then, as you get more and more advanced and we have a dense beacon network like we have with the lighting, you can start to get into some of those triangulation technologies. I gave a few examples of the use cases, but it's really understanding how are those going to differentiate you and make it easier for you to provide those kinds of experiences that, let's face it, all of us are shoppers, and we've gotten used to shopping online, shopping on mobile devices, and we're expecting more and more out of our retailers, and we're starting to choose with our wallets, where we spend our dollars based on that kind of an experience.
- Kristin: [09:07](#) Absolutely. That's why I feel so grateful to have you here as a resource for us today, because you're the first person I've had with this area of expertise on the show, although a number of the panels that I've led at our trade shows have talked about this, but it always feels like it's off in the distance. We're here today, late February, 2019, it's here, and Greg is deploying this-
- Greg Carter: [09:27](#) It is here.
- Kristin: [09:27](#) ... across the country.
- Greg Carter: [09:28](#) Yeah, I'll tell you, just to make that real for people, we've got to be a little bit confidential about who's doing what in this space, but to give you a sense of scale, we've got over 300 million square feet of retail establishments in the US that have deployed this technology. They're all still early in the journey of how to use the data, but they're moving aggressively, and they're starting with simple use cases, and then they're starting to move beyond that now, and basically building a physical trail with all the characteristics of a shopper journey, that's starting to mirror what online retailers are able to develop about their customers, where you're building a breadcrumb trail and you're

understanding where people are spending their time, what are they looking at? How long are they spending looking at things? This technology gives you the ability to do the same thing in a physical space.

- Kristin: [10:21](#) That is such a fantastic analogy. Basically, if we're looking at it as we go online and obviously a lot of product searches are starting on Amazon, but it really doesn't matter. You're in a search engine, you put in your criteria of what you're searching for, and you're served things. That's exactly what you're saying is we're able to do in a physical environment now with this technology.
- Greg Carter: [10:40](#) Correct.
- Kristin: [10:42](#) That is a fantastic, I love that. That's a great analogy. I have a question here. Are you able to help a retailer understand if somebody's coming into their store, if they were just at Best Buy prior, or PetSmart, or REI, prior to coming to your store and where they could go after? Is that something that you're able to?
- Greg Carter: [11:05](#) It is. I'll tell you, we haven't implemented that. But it is certainly something that can be done. Things like that have been done much longer than really exploring precise indoor location within a space. 'Cause that uses a technology called geofencing where you're really using the outdoor GPS satellites and you're tracking people, how they're moving throughout a city. You're drawing a geofence around targets of interest, so that could be certain stores, certain retailers, and beginning to build the breadcrumb trail about where they go.
- Greg Carter: [11:38](#) But the problem with that geofencing technology is that as soon as they walk into a store, the GPS system goes dark. We no longer what they're doing when they're actually in the retailer and they're interacting with products. That's the big advancement of having this indoor location capability.
- Kristin: [11:57](#) So it makes it, like it's not siloed or separated from that?
- Greg Carter: [11:58](#) Correct, and you can tie those things together, and we've got a lot of partners that really focus on the external geofencing, and that's typically a way a customer's going to do it. They're going to use us for the indoor location and they're going to use another partner for the external.
- Kristin: [12:10](#) Okay, that's amazing. It's not only very informative, but it's entertaining to hear this, because I almost feel like I'm watching

a sci-fi movie, but honestly, this is real, this is happening now. Let's go into the award you just won with Acuity Brands. Talk a little bit about that, 'cause it's a brand new award, so first of all congratulations, but tell us about the award.

- Greg Carter: [12:35](#) Yeah. Well, there's a number of things that we've been recognized for over the last year or two. But the one that I'm really excited about, just was announced in the last couple of weeks actually, and that was that we were named as a visionary in the Gartner Magic Quadrant for indoor location services, which is a fairly new category.
- Greg Carter: [12:56](#) As I talked about, the technology is only a few years old and has only gotten to be at the level of precision where people can really start rolling it out on mass in just the last few years. Gartner is the place that most people go when they want to start doing their initial investigation of technologies to aid their businesses.
- Greg Carter: [13:19](#) Being named as a visionary in their Magic Quadrant was a huge recognition of our success over the last four years.
- Kristin: [13:25](#) That's awesome. I just thought of another question as you were talking through that. In our markets, obviously there are retailers like Grassroots Outdoor Alliance, or REI, and they are a collection of brands. Are you able to share the data that you're receiving from the retail floor back to the brands?
- Greg Carter: [13:45](#) The simple answer is yes. We're absolutely able to do it. The question is business model and privacy and security. Because if you think about it, the retailer is the one who's going to invest in putting in the lights and the network infrastructure that enables all of this. The question is who owns the data? Is it the retailer? Is it you and I who are walking through these retail establishments and we're creating the breadcrumb trail?
- Greg Carter: [14:12](#) The answer is it's really a lot of different entities, and the jury's still a little bit out in terms of how we're going to navigate all those ownership issues. What we're trying to work on with our retail customers is new business models where the retailer can be incented to share data with the brands, because everybody's going to win.
- Greg Carter: [14:33](#) And there's already a history of that kind of thing going on with marketing funds that brands provide to retailers, so this just enriches how you could do something like a reverse option for shelf space, because you could be sharing back with the brands, the results in terms of dwell time, of people spending time in

front of your products, based on where you ended up being on the shelf, or same thing with marketing displays.

- Kristin: [14:56](#) It really feels like there's almost a new rule book that needs to be created around this.
- Greg Carter: [15:01](#) Exactly. That's exactly it.
- Kristin: [15:04](#) Again, my hope is that as brands and retailers come together on this, they're going to really align around what's best for the end consumer, because I think once they start to get into that street fight on who owns what, the end consumer loses and they have so many choices today, they can go anywhere and get a difference experience.
- Greg Carter: [15:21](#) I totally agree. And not to mention that, it slows the adoption of the technology, right? Which is why we're spending a lot of time trying to broker those discussions between the retailers and the brands, to figure out, let's start with things that are obviously win/win, and then we can worry about the edge cases where there might be a fight over data ownership later.
- Kristin: [15:42](#) Okay, and then also, another question popped to mind, 'cause again, I'm going to where my audience is and a lot of the opportunities that they've seen around transparency in the supply chain. There obviously are solutions right now available where you can actually look at the North Face jacket that I want, I'm in Boston, I can actually do a search and find out which retailer has it or what the stock is in a region, right? Is that something else that your product can actually connect with and work with?
- Greg Carter: [16:16](#) Well, I'll be honest and say that nobody's asked us to do that yet, so I haven't really looked into those systems. But what we are doing is we generate a lot of data, a lot of location data. [crosstalk 00:16:29] location data, you can ... More and more customers, of our customers, are starting to deploy various kinds of sensors in their space. That can be asset utilization sensors in a home improvement store, on a saw, or on a lift or pallet jack or something like that.
- Greg Carter: [16:51](#) Not only understanding where things are, but how they're being used, and all of that data can be passed up throughout the lighting network because of having a BLE radio within 10 or 20 feet of where any of that data's being generated. All of this data's getting uploaded and made available through the cloud, and what we're working on with our retailer customers is what other kinds of data do they want to mash up with that?

Greg Carter: [17:14](#) Whether it's point of sale data, whether it's supply chain data, whether it's stocking data. I'll give you an example of a proof of concept we did with SAP, about six months ago, where they have a product called customer activity repository, that is a single source of truth of a lot of those retail data systems. When we were able to use the APIs on our platform to pull location data, the use case was we've got certain items out of stock in a store and the store manager's trying to figure out how does he prioritize what things he has people focus on restocking first.

Greg Carter: [17:51](#) You can look at the profitability of that item, the price, and then start looking at the foot traffic that's passing in front of that item and get a sense of potential lost sales and come up with an impact score that can be prioritized, and that tells you which objects or which products to restock first.

Kristin: [18:11](#) That's amazing. Wow. Well, I love that I have you on the show right now, 'cause I feel like in two months, you could come back and give me an update with possibly a whole different set of-

Greg Carter: [18:21](#) That's right. It's moving fast.

Kristin: [18:24](#) ... reports.

Greg Carter: [18:24](#) It's moving fast.

Kristin: [18:25](#) And you're out talking to people all the time. I'm sure you do business with a wide range of retailers and obviously some specialty companies as well. I feel like when a customer goes into a specialty brand or retail storefront, they have a little bit of a different expectation in terms of what wanting to belong or perhaps they're getting information on a bike or a pair of skis or a backpack that they need to have fit or serviced or whatever.

Kristin: [18:52](#) I feel like what you provide here is actually going to be even more important to specialty as they start to embrace it and install it in their stores. Would you agree?

Greg Carter: [19:02](#) Yeah, I think that's absolutely true. I think the first use cases are frankly fairly simple, right? The idea of having your loyalty app with a product search and giving the consumer the ability to come in and be more efficient in their trip 'cause they can find where something's located. I think those are obvious and fairly simple but I think what we're finding what's more powerful is being able to track people as they move through the store and finding out where they spend their time.

- Greg Carter: [19:28](#) Is that influenced by the time of day? What kind of shopper are they? And trying to improve their experience based on the cohort, or the characterization we can make about those kind of people. So, we can make it easier to design the store to allow people to get to what they care about more easily.
- Kristin: [19:47](#) Right, okay. One of my questions for you was define the customer experience today, and my guess is, Greg, that it's basically about removing friction, and making things efficient, and improving a customer experience. That really hasn't changed, but in 2019, I know you have at Shoptalk in early March, 2019, your company's going to be hosting I think some sort of an event or showcasing the latest in IoT and connected building trends for retail.
- Kristin: [20:15](#) Can you maybe give us a little bit of a line of sight on some of the trends that you see without giving it all away before your event? 'Cause I know we're coming in a little before that.
- Greg Carter: [20:23](#) Yeah, sure. I think as you said earlier, these trends are evolving really rapidly. There's a lot of them that we see at these trade shows, some of which we partnered nicely with, some of which I mean are frankly just completely outside our realm of focus, but are interesting, like using augmented and virtual reality to improve the shopper experience.
- Greg Carter: [20:46](#) Where I think we're focusing, and I like the way you said it about reducing friction, we're trying to make it easy for a retailer to understand more and more about how customers are interacting with their physical stores so that they can do everything from making it faster for the customer to move through that space, putting the right products in the right place to make it easier, and then even improving the experience they have with associates, right?
- Greg Carter: [21:15](#) That can actually do both, it can both improve the customer experience but also cut the cost. If we can now look at where customers are grouping, where employees are, and determine if we've got the right ratio of associates to customers, to make sure that they're always available to help customers, then you don't spend time looking for somebody who's going to be able to tell you what you need to know about the products so you can make the right decision.
- Kristin: [21:40](#) Right. I also just feel like again, going back to your earlier analogy, it's almost like we're able to finally look at the physical retailer as almost a search bar. What your technology enables

us to do is get the data that informs us on how to serve them better.

- Greg Carter: [21:56](#) That's right. One other thing that occurred to me as you're thinking about specialty and maybe some of the smaller retailers who might be a little bit daunted about how they can take advantage of this new technology, one of the advantages of looking at a lighting based or connected building based technology set or technology infrastructure here is that this is not something where you've got to start from scratch and invest in putting something brand new in place.
- Greg Carter: [22:24](#) If you're using a lighting retrofit, you're first replacing the lights to improve energy and reduce the cost of that energy, and we're talking about a very small percentage increase to put the radios and the drivers in there, that enable all of this other functionality. The payback on that is a really short period of time, based on the energy savings.
- Greg Carter: [22:50](#) It really reduces the barrier of entry, especially for smaller players, to get into this space and have a really powerful platform that they can experiment with. We have some really interesting tools, we have a product called [DGLux 00:23:02], which was designed to help people prototype and experiment with streaming data, from any kind of sensors, whether it's location data or some sensor data.
- Greg Carter: [23:13](#) You can build visualizations, graphs, bar charts. You can build maps. Then you can set policies for evaluating that data as it's coming across and taking action. We've basically tried to set it up with a set of these useful tools and a low cost infrastructure to allow people to get started.
- Kristin: [23:35](#) Oh, that's awesome. I imagine that you guys have the capability to obviously help train and whatnot. I mean, a big part of this, as things evolve with sales reps and they become more of a proactive partner in terms of enabling stores to create the correct order and whatnot, but obviously this is going to speed up precipitously what reorders need to be, and also changing and being nimble around what you're stocking, depending on what you're learning about your consumers as they move through your store.
- Greg Carter: [24:03](#) Absolutely. I think in the world of IoT, one of the things I've learned over the last I guess probably 10 years now from being in this space, is there is no one size fits all solution to all problems. It's absolutely an ecosystem play, it's all built on

interoperable open platforms. You've got to find the right partners to augment whatever it is that you're providing.

Greg Carter: [24:25](#) I think there's already a lot of really good technology out there that tracks different kinds of data. I'm sure you've had shows around some of those things, around supply chain and reorder and tracking things with digital presence. This just gives you another tool in the tool belt to mash up more sources of data that give you a much richer picture of your customers and how they're interacting with you so you can serve 'em better.

Kristin: [24:52](#) I have a question also. Is there anything you want to add on privacy laws? Because obviously we went through a number of things last year on that front. We're seeing that every day, when we land on websites now, like accepting cookies and different things like that, but can you talk about privacy laws, in terms of how your technology might affect a business model if they incorporate it?

Greg Carter: [25:14](#) Yeah, absolutely. I mean, this is new ground and frankly, it's about time that we started to get some level of regulations that give some certainty to the industry about privacy, and cybersecurity. We had GDPR come along first, and that really started driving a lot of changes in websites. But it's speeding up with two laws that have recently passed in California. One on cybersecurity and one on privacy.

Greg Carter: [25:42](#) Both of those are due to go into effect in January of 2020, so all of the companies that play in the connected space are all scrambling to figure out how to make sure we can comply. It doesn't stop us from collecting data about people, but it makes sure that we put controls in place that make it clear what data we're collecting, and we've implemented that in banners on mobile apps, so that as people are coming into the stores and using this technology in their loyalty apps, that the consumers are able to understand what's being collected and why.

Greg Carter: [26:22](#) And then if consumers don't feel comfortable with that, they can either opt-out, or they can ask for their data to be removed, or they can ask to have their data be provided to them. We're making sure that we make that available in all of our software systems.

Kristin: [26:38](#) That's great. That's obviously really important in terms of building trust with that end consumer. As we look to wrap up here, and again, I'm just so appreciative of your time, we've done a lot of content recently on enabling specialty brands and retailers to bridge the digital divide. Essentially, they're all very

much aware that they compete for the attention of the consumer with mega, mega businesses like Amazon and Target and Nordstrom.

- Kristin: [27:03](#) We're all competing with them, no matter what size our companies are, and we have people like you and the technologies that you're offering help us bridge that digital divide. It does really seem like as they're incorporating this technology, and trying it out, it seems like change management has always been real difficult to do, 'cause you're trying to keep the lights on and service your customer, but then you have to incorporate technology like this, while also keeping your eye on what's around the corner. Do you have anything you can offer us in terms of tips on how to do that? It seems like you just are juggling flaming hula hoops all the time, you know?
- Greg Carter: [27:41](#) Great analogy. I mean, there's no doubt that in this age of digital transformation, competition is coming faster. The technology evolution is certainly happening faster, and it's hard to keep up with. I think this is why I was so attracted to what Acuity's doing, by using a lighting based platform for doing this kind of thing.
- Greg Carter: [28:11](#) Because up until now, you had to be a pretty sizable player with a big budget to be able to experiment with putting independent beacons throughout a store, being able to hire the right companies, the right partners to do the data analytics before you'd even be able to figure out whether you could take advantage of it.
- Greg Carter: [28:30](#) I think the advantage for a lot of the companies in the space are that the way has been paved to some extent by some bigger players, and this technology is now becoming available and democratized, and it's fairly inexpensive to get started, and the tools are there to learn how to apply it to your business.
- Greg Carter: [28:54](#) I would encourage companies to go in and try this, and see what they can get out of it before having to make a massive investment to roll it out across their fleet.
- Kristin: [29:03](#) Right. That's great advice. Then, one thing also, before I let you go, I noticed some of the things you're talking about around your Shoptalk presence is you're always going to be enabling retailers to understand how to optimize the buy online, pickup in store. Obviously everything you've explained about your technology underpins how to do that, but is there anything that you see on the horizon around that trend changing? Because

that's always been a big, big part of the opportunity for us as specialty brands and retailers, is being that last mile.

- Kristin: [29:36](#) I know I can see obviously how the technology helps this, but is there anything that you want to talk about in terms of that trend specifically changing, in terms of BOPIS? I hate that acronym, but it's Buy Online, Pickup In Store.
- Greg Carter: [29:49](#) I mean, the only thing I can tell you is that from talking to our customers, we only see it increasing. That's here to stay, and again, this is an example of understanding what your consumers are looking for. They value their time, they want to blend the online and the in-store experience, and so it's being able to be responsive to that.
- Greg Carter: [30:14](#) Whether that's doing a buy online, pickup in store, or it's enabling a personal shopper to go in and find the right things, you've got to take advantage of the technologies that make that efficient and low cost for you. I think there are things you can do with location based technology, there are things you can do with mobile devices and cameras that are combining with that, to be able to ... Especially if it's personal shopper, to be able to bring the person who's sitting at home, interacting mostly online, into the store when their shopper's there and have the whole thing be seamless and low cost.
- Greg Carter: [30:51](#) Yeah, I think the trend is going to continue, and again, it's important to have a good platform so that you can be nimble and respond to this and other trends that are going to come down the road.
- Kristin: [31:01](#) Amen to that. Well, this has been absolutely fantastic, Greg. Thank you so much for your time, and tell my awesome audience where they can learn more about Acuity Brands.
- Greg Carter: [31:10](#) Yeah, please go to AcuityBrands.com/iot. Or, you can come visit us at Shoptalk. We'll have a booth where we can demonstrate some of these capabilities and we're doing some talks there to help you learn a little bit more about these trends.
- Kristin: [31:26](#) Awesome. Thank you so much. I really appreciate your time, Greg.
- Greg Carter: [31:29](#) All right, thanks a lot. Bye bye.