

Consumers Are The Real “Things” In The Internet of Things

At Digital Signage Expo 2017 this March in Las Vegas, top signage solutions providers, vendors and end-users gathered for a roundtable education session to talk about the implications of the Internet of Things, and how when it comes to delivering great experiences, the focus always tracks back to the customer. In the end, it's about the people, not the things.

Panel



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What is IoT and is it important, or just a lot of noise?

Sean Anderson: Anything that's programmable and has connectivity is the foundation for IoT. It's similar across a lot of platforms, but the internet is the backbone. The devices can live online or sometimes offline. If offline, they can be connected via things like Bluetooth. Bottom-line - what is the device doing? What information can I send it, and what information can it send me back.

Max Stevens-Guille: To add to that, one of the other things we feel is important is the analytics that you build upon, by bringing all that data from various devices back in one form, and then transforming it into something that's more meaningful. Analytics that help you understand more about how your infrastructure is working.

IoT has implications for omni-channel. Smartphones add a new communication capability that consumers bring with them to venues. We can

look at a lot of data points, or instruments within a given environment, to understand what the consumer is interested in, and what actions they are taking, and form a closed-loop system that helps influence people.

That's particularly interesting in retail, where store form factors are changing constantly. Some are downsizing, some are upsizing. There are brands inside other branded venues, pop-up stores, a lot of variety.

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IoT helps us bring all that data, about what's happening in those environments, back into store operations.

Luke Wilwerding: At a high level we look at it in terms of enhancing the customer experience, store operations and new channels of both increasing and creating revenue streams

Aaron Kleinhandler: You really just use these machines to guide the customer journey. When someone walks into a store, what's the best way

to control that experience? You can control what the store looks like, for most parts, and what products are in there. What you can't control is the customer experience – how they interact with your storefront. So using these connected devices, machines, and analytics will hopefully help you inform the customer journey and influence the customer... to gain more revenue.

What does fan engagement mean in arenas and sports venues?

Michael Rocha: There are a lot of parallels to what retail is experiencing now and what sports went through five or 10 years ago, in terms of the experience fans had on their home TV or broadcasters network. It became so advanced, and so good, that people weren't going to the stadiums anymore.

So there was a big trend to upgrade the fan experience inside the stadiums, so it was worth going to the stadium. Retailers are going through something similar, where they have to enhance the fan experience or customer engagement, so that people leave the screens at home. Customers want the same data available to them at home, and want to enjoy the experience.

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So we do have some parallels, but some of the things that are unique to us is that we do have a game or event to react to.

In general, customers come to us only when there is an event, and we are trying to reach out to them on 24/7 basis. So, the minute they leave their house on the way to the stadium, we are engaging with them. When they are in the parking lot – tailgating - hopefully we are engaging with them. Throughout the event, and hopefully on their way home, we have kept that connection. And that's helping create a connection with our client's brand, and helping their ROI.

If we had to invent shopper cards now – where would you like the shopper to give the retailers the card, in the beginning or the end?

Luke Wilwerding: In the beginning. We have seen in both retail and QSRs people checking in through a kiosk or a localized app. There are also WiFi and beacon-based technologies being used for check-ins. Many retailers are now leveraging clienteling

applications. One thing to think about regarding store associate technology is it's generally a private experience where the retailer or store associate may know a lot about the customer, but how do I go about intelligently sharing that

information in a more social or communal setting – which is typically going to be a larger screen – where multiple people can interact. So there is both the identification and the journey through the retail or QSR environment. For example, in McDonalds or Wendy's, people are using both mobile apps and self-service kiosks to order, and

to identify themselves at the restaurant for pick-up. Customer information is also shared when people are reserving tables online or through mobile apps. We are seeing services moving to electronic formats, which leads to more efficiency and personalization of the customer experience.

How can we connect with consumers before they get to the venue?

Sean Anderson: As with many venues, the Six Flags mobile app is the underlying thread that ties everything together. The customer journey starts with people downloading the app or just visiting our website. People then decide a time or date to visit the park. We are not a destination park like a Disney or an Orlando park. We are more of a regional park – “I’m going to pop over this weekend” or “I have time - my family and friends are here. What are we going to do? – lets go to Six Flags!”

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Once they download the app, the journey starts. We have some people who like to “put their phones down” and enjoy the visual experience in the park, or put the VR goggles and enjoy those

rides. Other times, we have customers who like to optimize their day – get information, like what wait times are looking like.

We try to understand the customer journey so we can get them into the park and on as many rides as possible, so they can have as much fun as possible. If we can help them understand that there is smaller line at another ride (at the other side of the park) and something that fits their schedule, maybe they can hop over there. If there is a 20-minute wait for food at the Johnny Rocket – maybe they can go to a panini place next door, which has a shorter wait.

It’s important that this information pops on their phone while they are in the park - it will help them have a better experience. So we are looking at devices and technology at those spots in the park to give that information – which is really difficult.

We are a seasonal park – we hire and fire 45,000 employees every single year. So that means training, on-boarding and potentially firing them at the end of the day. But what we are trying to do is get them on-board and give them as much information as possible, so they can help the guest – and that’s a tough thing to do if the employees are new to the environment.

So we are always looking at technology – new ways to automate components, gauge information that can supplement data, so we can give the guest the best experience.

How is digital signage being applied as one of the things in the Internet of Things?

Aaron Kleinhandler: A lot of my company's focus is in the healthcare industry which is also going through its own revolution. The idea that the patient is more of a customer, and the experience they are going to have from way-finding, to appointment setting, to when they get in for their visit is new. Facilities are delivering relevant content either through digital signage or even on patient's own iPads or phones.

There is something similar in the automotive industry, also – where people are spending more time evaluating their purchase, or are waiting to see someone. This is the time that they will engage with relevant content and where the customer

wants to be engaged is highly important.

The other thing the healthcare industry is looking at is customer consistency. Using digital signage, other assisted selling tools or interactive screens is all for consistency purposes. It's very hard to have that consistency when you have 45,000 new employees every year – how do you enforce that consistency? Digital signage and assisted selling tools, scent marketing, music helps with that consistency. You want the same consistency and insights that you are getting online. Through omnichannel, you can get that consistency in-store. And with the tools that we have today, you can talk to that very easily.

Are you seeing any innovation in IoT and digital signage to direct people traffic to drive additional revenues?

Michael Rocha: Yes for example in arenas, we are seeing a lot more connectivity between all the different systems. From POS, to inventory, to line control, even parking lots or crowd arrival time.

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We are able to monitor that and make decision on what happens within the facility based on that information/data inputs and hopefully direct people to a more positive experience.

If we know it's a late arrival crowd, we can push back a major section of our entertainment set to a little later. If the hot dogs aren't selling as fast, we may put them on sale. So, we are seeing that when everything is connected, it gives a lot more flexibility - to be quick on our reaction.

Previously we would use the data from one event and hopefully fix it for the next event, or even the next season. Now we can react to something in a period and a half – which is pretty amazing.

Where there are huge amounts of increased data there are new security risks, what should we be aware of regarding data security?

Luke Wilwerding: Look at self-service kiosks in QSR environments, or a retailer via endless aisle. If you have a digital experience where you can't actually buy at that point of service, you will lose revenue as people walk to the cashier. They may change their mind. If you can close the loop at the point of service, at a kiosk or non-traditional POS station, you'll see attach rates and the volume of impulse purchases grow.

A couple of years back, retailers were using their e-commerce platform with credit card readers taking payment as a "credit card not present" transaction - and retailers paid a premium for this. But as self-service gathered momentum, brick and mortar retailers realized they have to start giving stores credit for in-store e-commerce revenue. And they have to offer secure EMV transactions or otherwise called chip and pin transaction. It's complicated, and it's different from how things were being done even a couple of years ago.

Sean Anderson: As a brand, you have to focus on standards. Six Flags' CIO made a decision some 10 years ago to do so. And these standards are being implemented not only in the new and future

parks, but also the existing ones. These standards help build security in a way that allows us to grow and expand really fast, and basically replicate the same model. For example, our data centers all look exactly the same. That helps reduce staff and keep a small set of knowledge and data that we maintain.

Security is very important to us, we have to maintain certain certification. We get audited, as well, and we always aim at surpassing those requirements. Our POS is also always connected and online, and from there we were able to light up other devices like digital screens, et cetera. And now, we are expanding into WiFi.

With IoT, you should also set policies and standards for any devices that are entering your network. So we go through this process before adding new devices to our network – we ask questions like, How long will the device be on our network? What happens if the manufacturer goes out of business? What are the plans in place if a massive vulnerability is found? Will the manufacturer patch it? How fast can they patch it? Does the device know how to be patch itself? What are the credentials?

How can retailers use that data to improve their operations?

Max Stevens-Guille: It's important to focus on data that is meaningful to them. IoT is more about evolution than revolution. The revolutionary aspects are what you can get out of it. However, you don't need to completely reape out your existing infrastructure to do so. It's important to talk to retailers and understand their objectives and the technologies that they are currently deploying. Digital signage could be one of them – how to leverage that platform to aggregate more data through various sensors, and bring that back

into the cloud and apply some machine-learning algorithms to understand various co-relations, and figure out what the different relationships are, and then build various processes to provide the type of return the retailers are looking for.

Just to add – the employee is also an important part of IoT. They should be provided with relevant data, so they can better support the sales process, identify and help customers, and collect feedback – to augment a data set as it evolves.

“Employees are also a very important part of this customer journey.”

Aaron Kleinhandler: Employees are also a very important part of this customer journey. We did a concept store for a tire retailer – completely re-did the store, got rid off the counters, got the employees out front to be more consultative.

They knew who their customers were, for the most part, but they didn’t train the employees in this new way of selling. There was this big disconnect. They were not hiring people who were comfortable with that style. You can use the data to design the store,

but you also have to pay attention to employees and make sure they can interact with customers.

Another thing that I hear about in-store data is we know what they bought, and when they bought it, but it is too late to influence the customer, at that point ... and get them to buy more). So, it’s important to recognize who’s coming in, bringing in things like social sharing.

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How do you manage Big Data Science and real-time analytic?

Michael Rocha: Coming from the sports side, we have real-time data visualization all the time, and we use those tools. For example, in racing we have the data regarding the tire pressure, engine/oil temperature of every car on every track coming at me five times a second. So it’s a tremendous amount of real-time data that we have to parse through, and then, in real-time, decide what’s the most relevant story we want to tell.

And what we are seeing is that these same toolsets are being applied to retail environments – where we are trying to take the customer through a journey.

The difference being, that in a stadium 1,000s of people are taking the same journey once, but in retail stores we are trying to take everybody

through their own individual journey. And the tools that we use for data visualization are being applied to these environments.

Luke Wilwerding: I would like to add something about catalogs. When people think about shopping on their phones or online, there is cached data, which is past searches for example he or she looked at a particular pair of jeans and items to go with them. When you move the shopping experience in-store, you don’t have the previous search data to go with it. There are several unique artificial intelligence platforms we are partnering with to provide some of the predictive experiences you would expect when shopping online or in-store. We also see RFID coupled with endless aisles concepts, that help augment the data and hopefully enhance the shopper experience

RFID tags are they being used in consumer venues?

Sean Anderson: No, we haven’t worked with a lot of RFID, except for maybe in our retail stores, or for some supply chain applications. However,

we are actively looking at Bluetooth for different use-cases. We have a couple of ways to capture wait times, and Bluetooth will help us to

some degree, and will also give us better ways to engage with customers and make announcements throughout the park or through their journey during the day. We also very interested in heat-mapping and facial tracking technologies, and using that to understand how long people are taking to get from one section of the park to another.

“RFID is being utilized and more frequently than ever before”

Luke Wilwerding: On the retail front, however, we do see a lot more adoption of RFID. Many RFID programs first started on the supply chain side, but as we see more and more “buy-online and pick-up in-store” concepts – the technology previously utilized to manage inventory is now migrating into endless aisles, connected fitting rooms and those types of experiences. And there are quite a few pilots going on that will soon make the news. So, to answer your question, RFID is being utilized more frequently than ever before for customer and front of house experiences.