

## THE FUTURE OF LIVE

### Assist

The future of live sport isn't just about augmenting the on-field action with new information or content. In fact, that may be the least of the changes we will see inside the stadium. Much bigger shifts in the experience are beginning to take hold, and they're being driven by AI.

AI is already enabling companies to build more conversational ways to interact with fans in the stadium environment. The New York-based company Satisfi Labs builds AI powered "virtual concierges" that fans can chat with online. The company built a bot for the Atlanta Braves that's embedded in the Major League Baseball Ballpark app that can answer many fan questions.

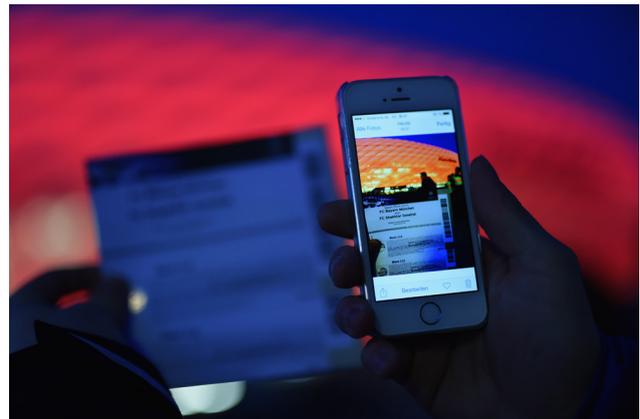
This technology is part of a growing number of so-called "chatbots" that enable fans to interact with technology using natural language processing. Increasingly, users will interact with these bots through apps they already use, such as Facebook Messenger or WhatsApp, in much the same way they interact with friends and family. You'll add a bot as a "friend" in the app, and just text it questions and receive responses.

To date, the focus of these systems has been on one of two roles. Firstly, providing information about the team and its players such as when the next game might be or how many goals a player has scored in a season. Secondly, in simplifying and facilitating many of the normal aspects of a fans' experience in a stadium, such as ordering concessions or finding a free parking spot. It is in this second space where we will see the most progression as organisations look to make continuous improvements to the in-stadium experience by tapping into the wealth of data that their customers generate.

### The stadium experience for fans

At a growing number of stadiums, fans can order food and drink in advance through these chatbots, or apps, having it delivered to their seat in some stadiums.

Concession stands will be able to keep products in stock and be able to add better food options to their menus. For example, Don White, CEO and co-founder of Satisfi Labs, says the Atlanta Braves changed its menu based on data surfaced by Satisfi showing that the team's fans had an unusually high number of food allergies. Fans can find out how long the queues are to exit a stadium car-park or whether there are any reported problems with their trains home, just by asking these chatbots.



As the technology develops over the next two or three years, these AI services will become more and more sophisticated. One of the biggest priorities for Satisfi is improving recognition of natural language. That means not just understanding a particular question, like "what's the half-time show line-up?" but actually understanding the phrase well enough to respond to multiple different versions of it, such as "who's playing the half-time show?" This can be harder than it might seem at first, since the keywords alone might be misleading: someone who wants to know what time the half-time show starts doesn't necessarily want to know which musicians are performing.

The good news is, the more people interact with these systems, the more data this generates and the more the underlying AI technology learns. Because the fans of one team are likely to be interested in many of the same things as fans of other teams, this learning is rarely contained to one organisation. “What’s really interesting is every time we add a customer then everyone’s product improves, because the machines talk to each other every day,” explains White.

### Moving into the realm of voice

The next stage for conversational interfaces is the move beyond text into the realm of voice. Virtual personal assistants – VPAs – like Apple’s Siri and Amazon’s Alexa are becoming more advanced and more mainstream, and it’s happening quickly: “smart speakers” like the Amazon Echo are spreading faster than any other recent consumer tech product, such as AR, VR and wearables, according to the research firm Canalis. Some estimates put the rate of adoption above even that seen by smartphones in the mid-2000s.



Soon, instead of turning to a chatbot on your phone to learn about a stadium, you’ll just ask your VPA, which will also know about your preferences and habits. This will lead to another major leap in the power of this technology to affect the sport experience. Fans will be able to plan a sports outing through the same voice interface they use for much of the rest of their life. And

these concierges will be able to much better serve their users. So much so that almost all the “manual” parts of the live sport experience will be passed on to these AI enabled assistants.

At home you will simply have to ask your assistant to book your tickets and it will be done in an instant. It will also recommend which train to get or arrange your parking spot, remind you when to leave, suggest a bar to visit before the game or ensure a beer is on order as you arrive.

The answer to any question you may have around the experience will be delivered immediately. As Albarino says: “People expect answers, whether they’re walking up to the stadium or whether they are three days before they get to the stadium; they want answers immediately.”

Furthermore, because your assistant will know you and your preferences, eventually all of this may be done without you even having to ask. One possible progression from here would be for stadiums to try to build this assistance in to the very infrastructure of the ground. Instead of having to pull out your own phone to place a food or drink order, you could one day find in-seat Alexa devices ready to serve you. Other voice-based technology could be positioned throughout the stadium to provide directions or other information.

As Dave Coplin of Microsoft is quoted saying in Merge: “I feel like virtual assistants are the holy grail for companies. They are the ultimate interface.”

## Visually and emotionally responsive assistants

All of this is on the relatively near horizon. However, the next phase, beyond voice, will take us somewhere only really seen in sci-fi films.

By 2025, facial recognition technology and computer graphics will come together with the Alexas and Siris of the world to create visually and emotionally responsive “assistants” that appear as real people on our screens, allowing them to communicate with users in a more human way. “Our face is the most emotional instrument that we have so the way in which we express emotion when we communicate using our face, using our body movement, is a huge part of the way in which we communicate... with each other,” says Greg Cross, the chief business officer of New Zealand company Soul Machines, which is already building computer animated virtual customer service agents for companies like Daimler Financial Services and National Westminster Bank.

The potential of these humanised virtual assistants is huge for sports. Imagine being told the team’s line-up for the game ahead, personally, by the head coach. What if you could conduct your own personal interview with a player after a match or be directed around the stadium by a legend of sport.

The gap between the fan and the sports they love disappears.

