



Going **Deep** on **Data**



Moon Javaid,
Vice President
of Strategy and
Analytics
at the 49ers



The San Francisco 49ers
want to know how fans feel...
Right now.



By Kelsey Alpaio

Photographs by Cayce Clifford

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The California Gold Rush was a transformative time for the West Coast. It was the United States' largest mass migration, bringing more than 300,000 people to the area before 1850. It brought not only the prospectors in search of riches, but also merchants like Levi Strauss, who sold them tools and apparel.

The Bay Area is now in the midst of a new gold rush—this one fueled by talent-hungry tech companies attracting young entrepreneurs, data scientists, software developers, and others to the area, triggering major changes throughout the region.

One of those changes has been the high-profile move of San Francisco's NFL franchise, the 49ers, from Candlestick Point near the San Francisco airport to Santa Clara, on the southern end of Silicon Valley.

During the hour-long journey from downtown San Francisco to the new stadium (named after Levi Strauss, by the way), you pass Google's campus, Adobe's headquarters, and Apple's "Infinite Loop." As you approach the stadium, the pristine red and white structure is framed by a picturesque mountain range on one side and an amusement park on the other. Also intriguing are the features you can't see—the 68,500-seat stadium has its own mobile app, free Wi-Fi, in-seat food delivery, and state-of-the-art solar power elements, and the first rooftop farm in the NFL.

"When you think about the San Francisco 49ers, you think about the five-time Super Bowl champions," says Al Guido, the team's president. "What you don't think about is [that] we were in the bottom tier of the NFL when we were at Candlestick Park, [our former stadium]. We only had roughly 80 full-time employees. We were only a football team. Now, if you think about the 49ers, we're close to 400 full-time employees. We have a media arm. We have a venture arm. We have a development arm. We have a strategy and analytics team. We've grown."

Guido says the 49ers have become not just a team, but a sports entertainment company. This evolution was driven by a very important strategic question for the company: How do you turn an organization that once focused on only 10 home games annually into what Guido calls a "365-day-a-year empire"?

Strategy at the 49ers

Just five years ago, there was no "strategy team" at the 49ers. This function took shape with the stadium move, as did the four primary objectives for the team.

Moon Javaid, Vice President of Strategy and Analytics at the 49ers, rattles off the four goals: data and analytics, managing revenue-generating partners, expanding the company's brands, and enhancing the fan experience.

► **Data and analytics:** This involves "helping the rest of the organization out with analytics to help them make great decisions," Javaid says. "With our sales and service team, we've been developing analytics and reporting for them, so that they can understand who's performing well and who should be hitting the phones more. ... [We do] retention modeling as well—understanding of our season ticket holders, which are the most at risk to walk away from us. That is really helpful for our team, to help them understand where they should spend their time."

► **Managing revenue-generating partners:** "Retail concession operators, our 365-day-a-year restaurant that's downstairs. ... We control and manage those experiences."

► **Expanding the company's brands:** "It could be expanding our brand as Levi's Stadium, working through all of our non-NFL events and developing RFPs. ... We hosted Wrestlemania 31. We've hosted the Gold Cup final. We're hosting the college football championship game this year..."

► **Enhancing the fan experience:** "[We're] thinking about our customers' long-term value. Making sure that our customers continue to have a great experience while they are here. ... The at-home product is so great—we need to ensure that our experience is competitive to that."

The at-home product Javaid refers to involves high-definition televisions, cushy couches, instant playbacks, and—coming soon to a living room near you—virtual reality experiences. That's where the 49ers' focus on fan data comes in.

Iterating on Customer Feedback

Seeing a live sporting event can be a pulse-quickening experience. But with every trip to a stadium comes snafus: long lines, sold-out concessions, overwhelmed restrooms. Javaid's team aims to minimize these annoyances as much as possible inside Levi's Stadium.

The first step in this process was diving into fan data collected as part of the NFL's annual survey, called the "Voice of the Fan." But, Javaid ex-



plains, “because it’s a general survey for 32 teams, it doesn’t get to the level of specificity that [we] think that you need. We wanted to complement it further with additional questions.”

With their own survey, which was completed in 2014, their response numbers jumped to 31,000. And the output was a 15-page document with 109 bar charts. With this information, Javaid and his team sat down with executives and stakeholders after every game to highlight findings and make recommendations for the next game.

“I was super happy with the progress that we made,” says Javaid. But then, during one meeting, Javaid recalls he was talking about Wi-Fi with the Director of IT “and I was like, ‘Jim, our Wi-Fi scored really poorly this game. You should go out and fix it.’ He’s like, ‘Well, great, which one of 1,500 Wi-Fi access points would you like me to fix?’ It was a light bulb moment for me.”

Javaid didn’t have the answer, which to him signaled a major problem: his team had to get much more specific. So in 2015, Javaid’s team iterated on the survey once more, and the output jumped from 15 pages to 64. He said the post-game report also became much more visual, helping his team better understand patterns in the stadium and areas that needed improvement.

This more granular feedback report led to 110 enhancements made to the stadium and operations over a two-year period.

Javaid also emphasizes the importance of keeping customers updated. If they ask for changes, make sure they know if improvements have been made. Bring them into the facility and show them the impact they’ve had.

“We understand that their satisfaction increases by 9 percent, by virtue of us making these changes and letting them know,” he says.

But even with the more detailed survey, there were still opportunities for improvement—specifically regarding the turn-around time of the reports.

“Generally speaking, if a game is on Sunday, we can generate the results by Wednesday,” says Javaid. But Guido wanted a faster turn-around. “He asked, ‘Can you do this sooner?’ I was like,

‘Okay... I can get it to you Tuesday. I’m going to have to completely scrap everything we’ve done again and rebuild it in order to make that happen, but we could do that.’ I saw the look on his face, and he still wasn’t happy. I was like, ‘All right, I could do it Monday, but...’ He still wasn’t happy. I was like, ‘Al, Monday, you’re not happy? What do you really want?’ He’s like, ‘I want real-time.’”

Obtaining Real-Time Data

Javaid’s first thought was, “That’s impossible.”

But that outlook changed a week later, when he found himself in a New York City airport contemplating four multi-colored emoticons ranging from “bright-green happy,” to “dark-red not.” He immediately saw a potential application for HappyOrNot kiosks inside the stadium.

HappyOrNot, the Finland-based customer and employee satisfaction reporting company, is utilized in a variety of industries, such as retail, transportation, healthcare, and human resources. The premise is simple: each “Smiley” kiosk has four buttons displaying different emotions and colors (bright green with a large smile for very satisfied, light green with a small smile for satisfied, light red with a small frown for unsatisfied, and dark red with a big frown for very unsatisfied). Customers or employees can quickly select their current level of satisfaction by simply hitting the button that corresponds. This data is then provided to the end user via a reporting dashboard.

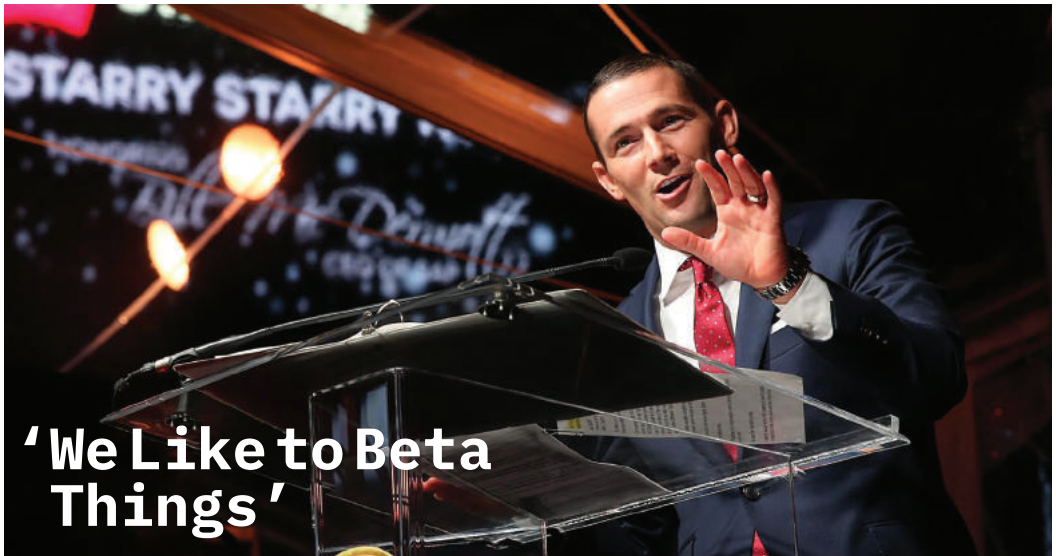
After just a 30-minute call with HappyOrNot, Javaid asked for 100 units to be sent to Levi’s Stadium. And after just one game with the kiosks in place, Javaid said his team had received 25,000 impressions from fans—a HappyOrNot record for single-day use. Throughout 2017 as a whole, they received 212,000 responses. But the data was still not instant. HappyOrNot historically would send out reports a day after impressions were received.

“That’s the model that they had for 10 years,” says Javaid. “What was great for me in partnering



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'We Like to Beta Things'

49ERS PRESIDENT **AL GUIDO** ON PILOT TESTS, GIANT TVS, AND FANS AS CONTENT CREATORS

Before becoming the President of the San Francisco 49ers in 2016, Al Guido was well-known in the world of sports and entertainment. Guido has had stints with the Phoenix Coyotes in professional hockey; the sports agency Legends; and the Dallas Cowboys, where he led a team that broke a \$600 million NFL sales record for personal seat licenses. *INNOVATION LEADER* sat down with Guido in his office, next door to Levi's Stadium.

Working with external partners We are so close to what I think are some of the smartest companies in the world. ... We like to beta things. We're willing to try and fail. I think a lot of people, given our infrastructure and our stadium and just how we think about the world, view us [as] a good partner because we're also willing to try the next thing. Some of that is because of where we live, but also some of it is because of the progressive nature of our organization.

The 'pull' marketing world We used to be in this push marketing world where you would push things out, and people would consume what they wanted. I think we're in so much more of a pull marketing world, where people are deciding on their own what they want to engage in.

Content becomes a big thing, because you only have a snippet of time to capture one's enthusiasm or excitement around your product or your offering. We spend a lot of time on, "Where do our customers come from? How do we interact with them better? What content are they consuming? What do they like? What stories are we telling amongst our players?"

What we find is our fans and our consumers, they decide [whether] to consume our product...based off how they feel about our organization—not so much what they see on the field.

A different lens You're no longer just an NFL football team. You're a sports entertainment company. We use that lens to make decisions within our organization. If you were only to view it as a football team, you would only make decisions that are good for you 10 days or 16 days out of the year. We think about our brand and our business as a 365-day-a-year empire.

How much more can the 49ers be involved in—whether that's in technology, whether it's in fan experience, whether it's in retail or food and beverage, whether it's in venture?

The changing fan ecosystem Before, when televisions got real big and HD television came out, it became cool to go sit back on your couch. Everybody said, "I can't imagine a world where they would get me to get off my couch."

The funny thing is, now...it's not as hard to get people off the couch, because people want to be part of an experience. They don't just want their feed given to them.

What's cool about mobile phones and stadium infrastructure today is you can do a lot more than you used to be able to. Before, you couldn't even turn on your phone or get connectivity. Now, you can.

The interesting thing before is you would always look at the downloads, how much people would be downloading. Now, what you're seeing is uploaded traffic. Your fans are actually your best content creators. ... We spend a lot of time focused on what's impacting our fans 355 times a year, and then what's impacting our fans on the other 10 days when we're here inside the building.

with HappyOrNot was I pushed them as well and said, 'You have the feedback in real-time. Can you develop an app that sits on top of it, so then I can start to pull the answers in real-time?' They were open to the idea."

So Javaid and his team worked with HappyOrNot to create a real-time reporting app, just for the 49ers.

"Instead of getting a report the following day or on Wednesday, you're getting an alert at that exact moment when people are unhappy or unsatisfied, and you're getting it to the key decision makers," says Javaid. "They're able to look at the concession stand or the restroom and say, 'This is what the problem is.'"

But HappyOrNot isn't just about the unsatisfied—it's about seeing where the organization is doing things right.

"People respond more favorably to [HappyOrNot kiosks] because it's so easy," says Javaid. "It's the beauty of simplicity. We get 20,000 people hitting them in a game. That's not 20,000 unhappy moments at a game. If I asked you to fill out a survey, if you're happy, you might not take the five to seven minutes that it takes. But if you're walking by a kiosk...it's the path of least resistance."

The next step for Levi's Stadium and HappyOrNot? Javaid's team is creating a "digital boardroom" in the stadium, featuring TV screens and live HappyOrNot stats.

"We'll be able to look at concessions, transactions coming in, entry patterns coming in, what's [happening] on social media, what's happening with the app," says Javaid. "It's essentially a mission control room for the business side. ... This would be more of an analytical control room where we could diagnose, assess, and handle problems in real-time."

Data Security & Privacy

When it comes to anything data-related, the question of security and privacy is always top of mind. With a high-tech stadium and advanced data analytics, how is Javaid's team keeping fans safe?

"You're being followed everywhere you go, everything you do," says Javaid. "It's obviously incumbent on companies that are collecting [data] to use it in the appropriate way. ... My approach is, we don't collect data for data's sake. Unless I can make an actual recommendation or insight off of what we are doing, we will not pursue it."

One example is the location-based data that the stadium's app generates. This kind of data trail is created as a by-product of helping fans navigate through the stadium. But although this data exists, it is not stored by Javaid's team.

"We have 2,000 beacons in our building," says Javaid. "We could follow you and chase you around and understand exactly where you are. I choose not to turn it on."

Playing the Long Game

Even with the success of HappyOrNot in the stadium, Javaid says there were some essential steps to getting everyone in the organization "bright-green happy" with his team's ideas.

"I came into the Niners five years ago," says Javaid. "There was no business strategy team before we were here. ... There could have been a mentality of, 'Why do we need you around?' I believe that [support] comes from the top. You need to have that backing from ownership to warm everyone up towards working with us."

Javaid also says that a big part of his team's success is a result of their focus on "emotional intelligence," or EQ.

"I spend most of my time working on EQ and how you approach situations, how to be gentle," says Javaid. "If you get a no, it's OK. You have to think about the long-term. You don't have to get your way. One of our core statements is that we are not the winners. What that means is we are here to ensure that the VPs [in the organization] and other groups get wins. Those are their wins. They're not our wins. We do the work because it makes us happy and because it's fulfilling for us, but we make sure that the other stakeholders know that we're doing this for them." ●



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