

How Tech is Driving Change in Sports

00:00:01

Speaker 1: Tech Reimagined. Redefining the relationship between people and technology. Brought to you by Endava, this is Tech Reimagined.

00:00:12

Bradley Howard: Hello and welcome back to Tech Reimagined, Endava's podcast. I'm Bradley Howard and I'm very pleased to welcome you to the latest episode of our show.

Season three of our show explores how technology is influencing the fabric of our society, the way we work, the way we live, and the way we do business. Stay tuned on every podcast platform to listen to our subject matter experts this season. And it's lovely today to be able to introduce you to a very talented technical expert out in a very broad and loved industry. It's Helen Pownall, engineering program Director at Sportradar and together we will take a closer look at how technology is currently driving change in the sports' industry. Hello Helen, welcome to the show. How are you today?

00:00:54

Helen Pownall : Hi. Hi Bradley. Yes, I'm fine, thank you very much. So just to give you a bit of an introduction about myself, as you just mentioned, I'm the engineering program director. What that actually means is that I look after the delivery aspects of the engineering programs in the product delivery unit. I look after the agile coach community within Sportradar, and I also look after things like integration, merges and acquisitions in terms of the engineering aspects of that and we also have another group under me called the Operational Excellence Group, which really focus on tools and services to help us measure what we do and to improve our ways of working.

So that's a little bit about me in terms of what does the engineering program director role mean. Just to give you a little bit more background about Sportradar, we have a number of different strap lines and mission statements, but we try to enhance the way the world experiences sport. And so what we try to do is we have collect data and we collect media and we process it to create products and services, which really underpin many of the sporting experiences that people enjoy at this moment in time. And that's I think what we're going to dive into in a bit more detail.

00:02:08

Bradley Howard: Really looking forward to it. So we got to ask the high level question first. Do you actually practice any sports?

00:02:14

Helen Pownall : Well, I used to. I used to play rugby. I used to play rugby when I was at the University of Lester doing my postgraduate. And I started off because I was, I'm quite short, so I started off as a hooker and so that's quite a good fun fact from my back pocket. And then I went on to, as I got a bit fitter, I got to play flanker which my favorite position. But at this moment in time, I don't get involved in any sports unless you count driving my kids to their matches.

00:02:45

Bradley Howard: And are you a fan of any particular sports teams?

00:02:48

Helen Pownall : Yes, I mean, I like rugby, I like cricket and of course apart from the national teams, but coming from Cornwall, I don't get to see the Cornish team unless they're playing near Richmond. So when they're in the area I do try and go up and see the Cornish Pirates play and catch your odd Harlequin's match as well.

00:03:05

Bradley Howard: Right, okay. And the first time we met as you, because you're an Endava customer, we actually met at some hospitality, Kenton Park racecourse, the horse racing. And from what I understand you're not allowed to place any bets on any sport because you often provide the feeds into some of those sports. Is that right?

00:03:22

Helen Pownall : Exactly right, yes. No, that's the thing that you have to sign when you sign up for Sportradar. You cannot bet, you cannot bet on anything, any sport because there's so much, especially in the engineering department. But regardless, I mean, you have so much going on in terms of, and so much access to in depth sporting and knowledge that you could have access to things which would be, let's say, conflict of interest. So yeah, no, we can't do that.

00:03:52

Bradley Howard: Well you certainly didn't provide me any data. I think I lost on every single race that I was there that evening. So onto Sportradar now, what kind of data do you collect? How do you collect it and who do you sell it to?

00:04:05

Helen Pownall : So we collect kind of anything and everything. So we collect fixtures, teams, odds, in play information. If you can imagine a data point about a piece of sport then we would either want to create it, collect it or analyze it or see if we could get a hold of it. We provide information basically with three product verticals. I mean we cover about 90 plus sports and we cover about 890,000 matches in a year. So that gives you an idea about the coverage and the breadth and depth of the sporting coverage that we have. And we use this data in a number of different ways. We have three main product verticals. We have Betting & Gaming, Sports Entertainment and Sports Solutions. So Betting & Gaming, as you might imagine, we provide data for bookmakers and that includes everything from full business solutions to essential content like data odd statistics, video streams, and from that to all around marketing and management services.

So that's for Betting & Gaming. Sports Solutions is one of our more recent acquisitions, that's from Synergy. So this is largely focused on providing solutions for sports organizations and coaches. So analyzing teams when they're playing and just seeing what happened within a match. Sports Entertainment, and that's focused on streaming media solutions and digital advertising. And that's focused on largely driving deeper engagement with fans and sort of the Generation Y. So whether you're betting on coaching, playing, or watching sport, it's likely that we've got a product or service that can help or power or is already powering that interaction. But on top of these three main product verticals we have our integrity service and that's all about protecting our sports from integrity threats, for example, match fixing, doping and other frauds.

So, we have, and that's kept completely separate from the product side of things, but we essentially analyze the information that we have, we analyze the data that's going on in the match and we can see suspicious behavior and we've got to have a whole bunch of

investigators, intelligence analysts, educators, et cetera, so that we can actually take appropriate action if we see something that looks really unusual, either from a betting perspective or from a performance perspective. But then underpinning all of this, we have our central engineering function, which is where I live, under the CTO of Ben, hopefully that's given you a picture of how we use the data. I mean we sell it to pretty much every household name you can think of, kind of Apple, Google, Bundesliga, NBA, NHL, International Tennis Federation. So a lot of the household names you'll have heard of will be working with us.

00:07:01

Bradley Howard: So that's just fantastic, isn't it? I'm thinking of the cycle of all the different organizations and individuals involved in the sports' industry and you pretty much provide those data sources to every single one of them. Everything from the integrity, which is to probably federations that run the sport all the way to the individual coaches who are looking at an individual player's performance.

00:07:21

Helen Pownall : Yeah, yeah, exactly.

00:07:23

Bradley Howard: You also had me at 90 sports, I'm not sure many people could actually name 90 sports. That is, that's quite something.

00:07:30

Helen Pownall : No, there's lots of various, so for example, everything that you've got, for example, different formats and different types of sports. eSports takes up about six or seven just because we've got each of the different, so there's lots of different things that you'd think, oh yeah, that's just one sport. But yeah, there are 92, actually. I've just looked it up.

00:07:51

Bradley Howard: So eSports, while we're on that subject falls into two categories. One is electronic versions of sports and I'm thinking of EA Fifa.

00:08:01

Helen Pownall : Yeah.

00:08:01

Bradley Howard: That you play on the Xbox and then the other side is Worlds of Warcraft or basically fantasy sports that are then played competitively and they have some very big prizes as well.

00:08:15

Helen Pownall : Yeah.

00:08:15

Bradley Howard: So how do you run some of the analytics that you currently provide on eSports because you are tracking something that is digital in the first place?

00:08:25

Helen Pownall : At the moment it's a combination. So we have scouts like we do with everything. We have people watching the match and sometimes we have, it depends

whether there's an API. If there's an API then we can Hoover that information up relatively straightforwardly. At the moment we've got a pilot running which is hopefully going to be launched very soon, where we're actually going to be using computer vision to monitor the matches and then we can record and analyze the matches using the models and using the computer vision to actually do the work for us. That kind of allows us to, we are using computer vision and AI in a number of different ways. I mean we've used it in lots of different places.

We hooked it up to Wimbledon and we are actually using it to get that next level of data. Going back to eSports, we have regular scouts, sometimes there's an API, we'll obviously kind of like that be the route one if we have that or there's a computer vision opportunity that we are just starting off with, which allows us to analyze the frames and then check the results against the scouts. At the moment we're doing it, we are running the two in parallel just to make sure that we're not missing out on anything and we are teaching the models and we are training the models correctly.

00:09:39

Bradley Howard: And on the coaching side of the business, Synergy Sports, have you got any success stories you can share about that?

00:09:47

Helen Pownall : Well, Synergy Sports joined with Sportradar relatively recently, although they've been with us for a couple of years now. And that completed the picture really in terms of our coverage. So we've now got everything that from grassroots upwards, and I'll give you an example from a basketball perspective, we have pretty comprehensive coverage in terms of every team. Most teams are using Synergy right from the elite amateur up to NBA professionals. And the way in which we normalize the information means that, and as an athlete you can be working through your various stages in your professional athletics career or sporting career and having the same set of data helping you and sharing, giving you feedback about your performance for the entire course of that career.

And they are very secretive in terms of how actually how they use the data to translate into improvements. So we don't have any stories we can say, " Oh yes, this is how they do it," because everyone's kind of trying to get the edge. But the fact that every NBA team has been using us since 2012 for that purpose and now every D1 college team since 2015 has been using us, I think speaks for itself.

00:11:04

Bradley Howard: Wow. And do you find that sometimes athletes will know what data's being collected about them, so they'll then play to some of those statistics? So for example, in football or soccer, as it's known in the states, we see statistics about how far each player has run on the pitch. Do you sometimes find that athletes will then start running extra lengths in order to make up for some of their time?

00:11:30

Helen Pownall : Yeah, I mean think that's an inevitable, unfortunately that's an inevitable element of human behavior, which is the, you measure what matters and unfortunately if you're measuring and publishing the wrong kind of metrics, or if people are understanding that they can gain the system by just running off in a bit of an unusual direction just to clock up a certain metric, then it will have that feedback element. However, one would expect that if you were using the portfolio of data that you have access to would allow

you to say, "Well actually how many assists did you have?" You'd have a waiting, which would mean that these things would balance out. But yeah, that's certainly possible.

00:12:14

Bradley Howard: And thinking to the future, are you looking at anything inside virtual reality or the metaverse?

00:12:20

Helen Pownall : When sport went into lockdown, when live sports largely stopped happening because of COVID a couple of years ago, the virtual reality team, we have a whole tribe dedicated to virtual reality. So we have essentially the Bundesliga football, they get played out. So what we, basically in March, 2020, we had a big problem because there's, we are a sports' data company and there's no live sports. So that was a massive issue for us. And so obviously we thought very carefully about how we could move forward with this and also how do we support our customers through this time as well because I mean that's a really existentially, that was a massive problem for them as well. So we thought that we've got virtual reality, virtual sports happening already. We can already provide the capability for that. We have all the information from our data and our performance data from the Premiership division and the Champions League already as to what's happened so far this season.

So somebody thought, right, okay, so why don't we just play out the rest of the season, but in the virtual world. And that's the idea behind what we now call simulated reality. We had seven tribes working on that, integrating the live data piece with the virtual reality piece with an engine, with the VI AI engine. And we managed to do that in 11 days. So we got this new product up and running and we were able to play out the rest of the season, if you like, the remainder of the season in the virtual world. And we've just kept it going. So the product is still there. Now we have the thing where before a real match is played, we have a virtual match which is played, the same virtual match and people can bet on that and they can bet on the real one. So definitely the virtual reality products we have are certainly very important part of our product suite.

00:14:21

Bradley Howard: Wow, fantastic story. And for such a unique time in the history as well. Keeping in mind that we're recording this towards the end of 2022 at the moment, what are your predictions for sports technology in the year ahead? Bear in mind that we still have the FIFA World Cup to play at the end of this year.

00:14:39

Helen Pownall : Yeah, I mean think one of the key things, we've touched on it briefly already. I think AI, we use this a lot and we're starting to use AI and it's starting to come into a lot of what we do. AI and computer vision really are starting to really accelerate and enhance almost every aspect of our products and services. So for example, betting and gaming, we are now using this to, AI to deliver the next level odds where we can basically look at the market.

We can look at the state of the market and look at the liabilities and based on the liability as well as the overall market position, we can actually give an odd that's really quite compelling or quite sort beyond the market that the standard market pack and we can do this because we've just got so much access to the data around the market and we can use our models really effectively to just give us and the book maker and also that the

punter can get the benefit from that. So that's one of the things that we're we are going to be doing in the betting and gaming space.

00:15:50

Bradley Howard: Do you look across the market just for one bookmaker or do you look at in the entire market across bookmakers about the entire match, for example, or race?

00:16:00

Helen Pownall : Yeah, we can look at the whole market, but for a particular market. Yeah, we can look at the whole market for a particular race. So there's a couple of, I guess a couple of nuances is some bookmakers are obviously our customers so we can have deeper access to what the actual performance is for that particular customer and what is going on with that particular customer. But obviously there are other ways in which we can get full market data, even if we don't have this person, this bookie as one of our customers.

00:16:34

Bradley Howard: Any other trends that you can foresee?

00:16:36

Helen Pownall : In terms of AI and computer vision, well, AI is helping us with our integrity product massively because we are now training the models to recognize patterns whereas before it was very largely manual process and now we can just look at the, train the models to look at the behavior and actually alert a particular and an individual to say, " Hey, do you think this is something that looks suspicious?" And then we can give that feedback loop back to the model. If it's not suspicious, then we can say, " Okay, fine." So that's enabled us to really improve our coverage of the integrity product. We are now offering this core monitoring service for free to over 150 sports partners. That's what AI has allowed us to do because we can then just, we can run it so much cheaper. In terms of the Synergy products as well we've, introducing AI and computer vision allows us to manage and analyze the matches much, much more rapidly.

So instead of a 24- hour turnaround we can then get a match analyzed in about two hours. So for example if someone's got a match on a Thursday and then they're preparing for a match on a Saturday, that player has got the ability and that team has got the ability to then to almost kind of look straight away at what happened on Thursday without too much of a wait before they prepare for the next match. So I think these things like to getting the depth of data and getting the insights that the depth of data allows us to get access to is going to be one of the most influential things I think in the future of sport in the coming year.

00:18:14

Bradley Howard: I can almost imagine in my mind that we're going to start seeing professional players come off a pitch or after a race and instead of opening the bottle of champagne straight away, they're all going to be opening up an iPad looking at their personal performance and what the online AI coach says about them and getting some people disappointed even after winning some massive really important race. I guess the genius bottle is already open on this one, but can you see a level where if it becomes enough is enough, I guess as the data provider you're probably thinking no, just keep going.

00:18:47

Helen Pownall : I think no. No, I don't think so. And actually it was really interesting because when I was looking at the Synergy piece, there was, there's several examples where you can see interviews with NBA, professional NBA players and they're just being interviewed after the game and they just go, " Yeah, I got straight onto Synergy." And they weren't product, I mean it wasn't product placement, it was just kind of a matter of fact. It was just so, yes, no, I mean, I was just watching Synergy for the, to get up to speed with my new team, the opposition, and it just seems like an automatic thing for them to do.

00:19:25

Bradley Howard: Right. There I am checking my Strava profile every time I finish a run or cycle and thinking NBA players do exactly the same after one of their matches as well. It's just on your platform instead. Oh, that's just absolutely fascinating.

Helen, thank you so much for sharing some of these valuable insights with us today. It's such an amazing industry to work in. To all of our listeners, thank you for joining us today and we're really looking forward to having you back next week. If you enjoyed today's episodes and I would imagine you really did on that one, then please share it with your colleagues, your friends, and your family. Until next time, I'm Bradley Howard and this has been Tech Reimagined.