

# Stats Perform and Pixellot Provide Celtic FC with a Competitive Edge through Combining Tracking Data with 8K Automated Camera Technology

As they push towards a ninth successive domestic league title, Celtic FC are reaping the rewards from investing in state-of-the-art tracking technology last summer to optimise their analysis from each first-team game.

Since 2018, Celtic have utilised the combination of Stats Perform's SportVU system and Pixellot's automatic video production system, as designed for elite football clubs. Initially starting out as a fixed installation at Celtic Park, where all home matches are played, Celtic have this season added a mobile system to ensure that the same detailed approach to analysis can be achieved at all away matches too.

Both SportVU and Pixellot use artificial intelligence to deliver best in class services for analysis and video capture respectively. Whilst SportVU provides Celtic with tracking and fitness data, Pixellot's 8K high definition camera system sits on the half-way of the pitch and generates three types of video for the club's team of performance analysts to take advantage of:

- **Panoramic View:** A video that not only captures the full pitch in a single shot, but one that Celtic's match analyst can then zoom into anywhere on the pitch, whilst also creating extra videos from multiple areas of the pitch simultaneously
- **Tactical View:** An automatically-generated live video that tracks all 20 outfield players to keep them in shot at all times
- **Traditional View:** An automatically-generated live video that follows the play and the ball to simulate a clean TV broadcast feed for Celtic, which sits alongside the panoramic or tactical feed



In delivering this technology, Stats Perform and Pixellot provide clubs with both an interactive mobile app and desktop software to get the most out of their analysis. This enables key moments to be logged live during any match for instant video review, with these synchronised across devices for more in-depth analysis conducted post-match.

These innovations, coupled with the accuracy of Stats Perform’s tracking data, were key factors in Celtic’s decision to not only implement the new technology initially, but to add to it ahead of the 2019/20 campaign, as the club’s Head of Analysis, Craig Dunbar, explains: “The quality of the Pixellot video is unparalleled,” says Dunbar: “We compared many different providers before we renewed with Stats Perform and they consistently came out on top. We could also see that the optical tracking solution offered by Stats Perform was the best solution in the current market. They are industry leaders in data accuracy without compromising speed of delivery.

“We utilise the Pixellot system at all home matches for our tactical analysis. From this season we have been using the mobile system which has given us the ability to gather fitness data away from home as well as providing us with a tactical and panoramic view. This has been invaluable for us.”



Celtic have been collecting tracking data from away games this season, both domestically and during their Europa League campaign

Player performance data, captured using the same footage, is also used by the club’s sports science team to monitor each player’s physical outputs throughout the season, used in parallel with data collected from GPS devices.

Celtic are also looking to take advantage of Pixellot’s live analysis capabilities when linking up with third party software, with Dunbar adding, “We use our Pixellot camera for postmatch analysis purposes, but we are currently looking to integrate the live camera into our matchday analysis through SportsCode.

“As a club, we find most value in being able to see events using the tactical camera view. This feature is also synced into another platform we use, Edge Analysis, which also benefits our analysis processes.”

By working in partnership, Stats Perform and Pixellot are helping Celtic and a number of other forward-thinking teams enhance their analysis by combining state-of-the-art camera technology with FIFA-certified tracking data – informing weekly plans and helping coaches make key strategic decisions to further optimise performance.