



A digital replica of a game unfolds in real time via Tracab's Virtual Arena // Tracab

ADDING A DIGITAL DIMENSION TO REVENUE

Kevin Roberts reports on the growing value of digital data delivery systems for football

FOOTBALL'S CURRENTLY under-exploited digital rights portfolio could eventually deliver a far larger proportion of the game's media revenue streams according to the man behind one of the most innovative and experienced operators in the sector.

Johan Apel, CEO of Tracab, the Swedish company which works with FIFA and many European leagues, as well as providing the systems which deliver data through Delta Tre for UEFA, believes that digital rights will become "bigger and bigger and ever more important as new technology platforms emerge and younger audiences continue to gravitate towards new ways of engaging with sports content."

"Already the (German) Bundesliga is talking about revenues from digital exceeding those from TV in a matter of years and in Sweden online and digital is already taking a higher share of the

advertising cake than television."

The digital revolution is up and running and Apel and his colleagues are determined to be at the forefront.

Since the first successful live game in 2005, Tracab has run over 1,500 live productions. This year, Tracab will be deployed at a record number of games in club and international competition to produce a stream of real-time data that is processed into a variety of digital products, targeted at different audiences.



In the simplest terms, Tracab uses 16 cameras in the grandstand to cover every inch of the football field in 3D. The cameras track every movement of players, officials and, of course, the ball twenty five times per second delivering a stream of digital data which is processed to produce a real time representation of every run, pass, free kick, corner and shot.

Want to know how far a player has walked, jogged, run and sprinted, how many passes he has made or shots he has made and Tracab has captured the data, accurately and in minute detail.

So how does this data capture and processing translate to a profitable business? If you're watching a live game on television in Russia, Sweden, Denmark, Austria or Hungary, it is Tracab which has generated the match and individual player data which appears on your screen.

In addition, the data can be

processed to produce virtual replays to analyse match incidents in infinite detail from any angle.

Broadcasters are increasingly using analysis tools powered by data produced by Tracab to enhance pre and post match shows while the system also gives managers and coaches access to the most detailed performance analysis data which is both live, reliable and easily archived.

If you're a football fan unable to get to a game, you can go online and watch a digital replica of the game unfold in real time at Tracab's Virtual Arena. In Sweden, as an example, it is hosted by the country's best-selling tabloid newspaper. Around Europe, newspapers rely on Tracab data to add an extra dimension to match reporting while online services take live feeds or deliver regular updates.

One suspects that this range of digital products may prove to be the tip of the iceberg. Yet Tracab could have developed, not as a multi-faceted media product, but solely as a tool for helping referees.

"In the summer of 2003 I received a call from someone at the Swedish FA asking whether my virtual graphics company Hego could deliver technology which could help referees when making tight offside decisions," Johan Apel explained.

"We went to Saab (the Swedish aerospace company and not the GM-owned auto manufacturer) to discuss how their image processing technology might be adapted for this new role. As the discussions developed it became clear that rather than just tracking for offside decisions we could track everything that happened on the field for a range of different purposes."

The upshot was the formation, with Saab, of Tracab to develop and exploit the potential of a concept which has developed continuously ever since. In May 2005, Tracab was used for the first time to cover the final of Royal League, the regional Scandinavian league, played amongst the best teams in Sweden, Norway and Denmark.

"Without going into the detail of the technology, the 16 cameras which we

use produce media streams which are processed to give X, Y and Z coordinates in real time for every object on the field. Because we are uniquely getting three co-ordinates rather than just two, we are operating in a three dimensional environment which is particularly important in a sport like football where the ball spends a lot of time in the air," he said.

It is also one of the factors which differentiates Tracab's patented technology from other systems which are based on just two co-ordinates.

"While at first we thought that just getting those co-ordinates was Nirvana and others thought it was really cool, we had to quickly work out what we were going to do with the information and our long-term business model," Apel said.

In effect, Tracab has created a new set of rights which can be monetised in a number of ways. "In Sweden, people watch games on the Virtual Arena we've created while listening to the web radio commentary," Apel said.

"We receive a fee from the country's major tabloid newspaper as our media partner to host Virtual Arena on their site and we also share revenues from the sale of advertising and sponsorship around the Arena. The advertising inventory around Virtual Arena in Sweden was sold out in just three days.

"When we work with leagues we take the commercial risk and meet production costs and take responsibility for selling the data. When we have recovered our costs we then share the revenues. I am so excited about what can be achieved because I believe that this is an area with such tremendous potential. TV is a limited medium surrounded by considerable legislation; online there are fewer restrictions on how you go about in-content advertising and, of course, there are less limitations of space."

The company is working to develop relationships with major European leagues and announcements are expected shortly. "I am convinced that there is a lot more that we can do. The virtual world is growing almost by the day and we are best placed to provide a

DISTANCE		
1	THOMAS KRISTENSEN	12453 M
2	STEPHEN IRELAND	12064 M
3	PABLO ZABALETA	12056 M
4	ATIBA HUTCHINSON	11845 M
5	VINCENT KOMpany	11729 M
6	OSCAR WENDT	11387 M
7	ZDENEK POSPECH	11064 M
8	WAYNE BRIDGE	11043 M
9	AILTON ALMEIDA	10987 M
10	SHAUN WRIGHT-PHILLIPS	10498 M

ANTAL SPRINT		
1	CRAIG BELLAMY	84
2	STEPHEN IRELAND	82
3	ROBINHO	78
4	SHAUN WRIGHT-PHILLIPS	77
5	WAYNE BRIDGE	75
6	OSCAR WENDT	72
7	AILTON ALMEIDA	71
8	ATIBA HUTCHINSON	68
9	ZDENEK POSPECH	65
10	PABLO ZABALETA	63

HURTIGSTE SPRINT		
1	MICHAEL RICHARDS	31.43 KM/H
2	CRAIG BELLAMY	31.35 KM/H
3	WAYNE BRIDGE	30.87 KM/H
4	SHAUN WRIGHT-PHILLIPS	30.64 KM/H
5	ZDENEK POSPECH	30.55 KM/H
6	MICHAEL ANTONIUSSEN	30.55 KM/H
7	ATIBA HUTCHINSON	30.02 KM/H
8	STEPHEN IRELAND	30.02 KM/H
9	MEDUN OJUDICA	29.99 KM/H
10	AILTON ALMEIDA	29.88 KM/H

Top: Distance run - FC Copenhagen v Manchester City (19/02/09)

Middle: Number of sprints - FCK v Manchester City

Bottom: Top speeds of sprints - FCK v Manchester City

// All pictures from Tracab

bridge between the real world of sport and that virtual world," Apel explained.

"The world is changing and the demand for new ways of enjoying sport is changing. We are committed to being a disruptive technology which challenges convention and leads that transformation."

While football has been the main focus to date, Tracab is already testing a number of other arena-based sports for launch later on this year.