Technology is a Gamechanger for Sport

Darren Watkins

Biography

Darren began his career as a graduate Military Officer in the RAF before moving into the commercial sector. He brings over 20 years experience in telecommunications and managed services gained at BT, MFS Worldcom, Level3 Communications, Attenda and COLT. He joined the VIRTUS (https://virtusdatacentres.com) team from euNetworks where he was Head of Sales for the UK, leading market changing deals with a number of large financial institutions and media agencies, and growing the company's expertise in low latency trading.

Additionally, he sits on the board of one of the industry's most innovative Mobile Media Advertising companies, Odyssey Mobile Interaction, and is interested in all new developments in this sector. Darren has an honours degree in Electronic and Electrical Engineering from University of Wales, College Swansea.

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Abstract

Behind any series of sporting events is a great tech story, and this summer was no different. Virtually all professional sports and athletes now use IoT technology – where data is captured and analyzed to reduce injury, optimize training, improve performance – and make the sports person, team and club successful, and the fan experience richer and more interactive than ever. The good news is that coaches and fans alike appear to be addicted to data. So, the opportunity to harness more data will inevitably make sports more competitive and compelling, and attract larger audiences. If they get it right, the opportunities for the technology companies is enormous. How to really unlock data value is the issue clubs and sports brands are wrestling with, and this is the challenge for tech firms to answer.

Introduction

In the world of sport, extreme spikes in data traffic push backend infrastructures, and while the future seems expansive for the use of innovative data technologies within sports, the benefit of IoT and Big Data will only come to fruition with the right processing, power and storage capabilities behind it.

It feels like autumn has come and gone over night, and the premier league started with a flourish. But let's not forget what a fantastic summer of sport we have had! From Wimbledon, the Tour de France, the Lion's tour, through to Formula One – sport lovers around the world were spoilt for choice – and behind the scenes is a great tech story.

The Internet of Things (IoT) is widely used by almost all professional sports. It is used to collect big data for analysis to optimize training, improve performance and reduce injury. Sports clubs have started to link information from their cameras and video screens with other sources of data – especially information from GPS (global positioning system) satellites and accelerometers worn by players.

Fans are also seeing the benefit, using technology to engage more with the sport that they love. Social media traffic spikes during sporting events (we tracked two million searches for basketball star Kyrie Irving during just one NBA game in July) show that fans want to share, engage with each other and soak up information about every aspect of a game.

Football is using technology so fans can immerse themselves in the game and get even more passionate about the trials and tribulations of clubs and their players. In 2016, BT Sport re-launched their app for mobile and tablet devices offering a greater in-depth experience for fans watching live sport.

Thanks to real-time data tracking, viewers can easily see who is making the most passes and covering the most ground, and where all the action is taking place on the pitch. If that isn't enough, they can delve even deeper and instantly access a whole host of season statistics for any player they chose.

However, whilst the opportunities are expansive for these innovative technologies, the possibilities are limited by issues of complexity and capacity. Extreme spikes in data traffic challenge backend infrastructures and the benefits of IoT and Big Data will be felt with the right processing, power and storage capabilities behind it.

Technology is the driving force

Tech experts know that IoT and big data puts intense pressure on the security, servers, storage and network of any organization – and the impact of these demands is being felt across the entire technological supply chain. Sporting organizations, just like any other commercial business, need to deploy more forward-looking capacity management to be able to proactively meet the priorities associated with IoT connections. It all requires a vast amount of storage and computing requirements, which many organizations can't handle alone.

Progressive technology used in Formula One racing makes the sport a good case study to demonstrate the capacity challenge. Since the late 1908s F1 cars have been kept under close scrutiny with telemetry technology, which has developed significantly over the years and now measures everything from oil, water, exhaust and tyre temperatures to speed, engine revs per minute (RPM), clutch fluid pressure, G-force and even the driver's heartbeat. The data it creates, when analyzed effectively, can bring significant competitive advantage.

There are a huge number of considerations for an effective telemetry data journey. Intense pressure for real time analysis and response, huge data rates, available frequencies and acceptable latency – and system reliability in hostile environments – all require extensive and sophisticated infrastructure. For some teams, this means high-performance computing (HPC).

The strategic importance of data in sports, means that ultimately, data centre providers like VIRTUS, are centre stage in this sporting evolution. Apart from being able to store IT generated data, the ability to access and interpret it as meaningful actionable information – very quickly – is vitally important and gives huge competitive advantages to those who do it well.

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For sports organizations, getting their data centre strategy right means that they have an intelligent and scalable asset that enables choice, growth and improved performance. But, get it wrong and it becomes a fundamental constraint for innovation.

Choosing a partner

So how do sporting organizations choose a technology partner to help them capitalize on the data capture and analysis opportunities? Building their own data storage infrastructure isn't just costly and time consuming, it ignores the expertise which resides in the data centre industry, which can be crucial in helping them to innovate faster.

Partnering with the right organization means not having to invest in building systems, saving time and money. Trusted technology partners can also offer security assurance. It's crucial, of course, that sensitive information that can make or break a team or player, is held in a secure and reliable facility. But, of course,

caution must be exercised when selecting a technology provider. Lengthy contracts mean clubs may find themselves bound to technology which can't scale, and has the potential to hamper innovation. Other clubs could have more flexibility to adapt to newer systems to give themselves a competitive edge. So, the right technology partner, not just 'a technology partner' is critical.

The answer for teams and event organizers must be to partner with technology providers with a commitment to being transparent, and who have a track record for flexibility and innovation. It is vital that competitors and clubs ask tricky questions of providers – about infrastructure, scalability and energy consumption – before they sign on the dotted line.

The sporting industry has already been radically changed by the application of digital technologies, and the pace of change means that no club can afford to be complacent. The marketing opportunities to engage with fans, and the performance enhancing opportunities to better players' outcomes, are enormous.