

MOBILES TO ENHANCE THE LIVE SPORTS EXPERIENCE

IMPACT!

Engineering and Physical Sciences Research Council | Case study 18



Imagine watching a football match, seeing a foul and being able to immediately swap comments with friends who saw the same incident from the other side of the stadium.

↗ 29.9m

Total attendance at Premier League and Football League games in 2008/09.

↗ £554m

Premier League matchday revenue in 2007/08.

Source: Deloitte

↗ 1.8bn

Number of worldwide mobile phone owners in 2004.

Source: ESRC

By allowing mobile phones to communicate with each other without sending messages via a network, new technology will enable people in different parts of a stadium to share banter, photos and video clips instantly, reliably – and free of charge.

IMPACT ON CONNECTION

- By allowing fans to swap banter and photos instantly, new technology will add an extra dimension to the live sports experience – an industry worth more than £500m to the UK economy.
- Mobile-to-mobile communications could assist emergency healthcare, by allowing people at an accident scene to communicate with each other even in areas without network coverage.

Making the connection

Currently it can be hard to get a mobile phone signal in a crowded sports stadium where there is a lot of interference. Even if a signal is obtained, messages can take a long time to be delivered to the recipient's mobile.

With EPSRC funding, researchers at the University of Glasgow have developed a series of computer programs that make so-called 'ad hoc networking' possible for any number of fans wanting to swap thoughts with each other at a live event.

The application makes innovative use of short range communications allowing a fan's phone to connect with up to seven other users at the same time, without using mobile phone masts. They do this by harnessing Bluetooth, a well-established form of wireless networking.

However, ad hoc networking has never been used before for direct phone-to-phone communication in real-world settings. The programs are the first to enable recent advances in ad hoc networking to be applied to phone-based end-user applications. They simply have to be installed onto standard iPhones to make mobile communications faster and more direct.

"Chat and banter need to be immediate," says Dr Matthew Chalmers, who is leading the project. "If a disputed goal is scored or a yellow card awarded, you want to hear what others have to say about it straight away, from their vantage point in the stadium. Direct mobile-to-mobile communication can make this possible."

Extending social networks

"It's really about extending a Social Networking philosophy to sports stadia and giving spectators a richer experience."

If picked up by industry, the new technology could start reaching the market within the next year or two.

In the long-term, mobile-to-mobile communications could play an important role in assisting emergency healthcare, by allowing people at an accident scene to communicate with each other even in areas remote from a mobile phone mast.

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