Technology Strategy Board
Driving Innovation

Innovation **ideas**

SPOTLIGHT ON A CURRENT PROJECT #003

Putting viewers in the picture

Remember the 1966 World Cup?

Even if you don't, you probably know there is still controversy about it.

What if new technology could make arguments over whether a goal is actually scored a thing of the past?

Creative media producers are constantly looking for ways to improve our television viewing and get us as close as possible to the action unfolding on screen.

Now researchers are working to put an extra spin on live action entertainment and sports programmes, by adding pioneering 3D and stereoscopic techniques to conventional 2D production.

These techniques could mean that viewers could see the 'hidden' angles at the goal or try line that can make some scoring/winning judgements so difficult for referees at the moment.

And it's just one of the potential outcomes of the i3DLive project.

The project was set up to explore methods of extracting 3D information from 2D multiview video for live action scenes, enabling production teams to give a much better view of the action.

A consortium including leading visual effects software company The Foundry is hoping to make a series of scientific advances all aimed at creating easier stereo production, better 2D production and enhanced viewer experiences.

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The research will build on research carried out at the University of Surrey into the integration of witness and principal cameras and additional cues, such as shading.

Ultimately i3DLive will create products and services for the emerging 3D and stereoscopic sectors within the global media market, particularly in the film and sports television sectors, with potential in other genres, such as children's programming, natural history and interactive programming.

It means that nature documentaries and other programmes could offer a much rounder view of the action without loss of quality or massive expense to production companies.

The UK is already leading the way in developing such technologies throughout the entertainment industry.

In the area of postproduction, a 2003 UK Film Council report showed the UK to be one of the top three providers of visual special effects for the global film industry, with nearly 1,000 specialised companies providing services.

The UK postproduction industry has a turnover in excess of £1.39bn, of which visual effects account for an estimated £420m.

The market for technologies such as i3DLive is too new to quantify, but digital cinema (D-Cinema) figures suggest that the future is bright. The installation of digital screens is seen as an essential precursor to the roll-out of 3D film, and by the end of January 2008 nearly 6,000 screens had been converted.

Leading creators of digital media content production, Tools Vizrt, estimates the high-end TV broadcast graphics market to be worth $70-100m, and the BBC has identified 50 major broadcasters worldwide as potential buyers of the developed technology.

Project contact
Abi Bowman
Project Manager
The Foundry
1 Wardour Street
London
W1D 6PA

T: **020 7434 0449**
E: **abi@thefoundry.co.uk**

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AJ307D

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30 months – ends May 2011

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£500,000

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£1.8m

Project partners
BBC R&D
University of Surrey
The Foundry

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