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## WHAT IS THE BEST WAY TO INFORM COMMUTERS ABOUT SERVICE DISRUPTIONS IN BUSY AND NOISY RAILWAY STATIONS?

**C**urtin's Professor of Learning Technologies Ric Lowe is collaborating with two French research organisations to investigate the effectiveness of animated visual information for commuters.

'The aim is to find an alternative to the transitory verbal announcements about transport service disruptions,' Lowe said.

'Voice-over announcements are hard to hear in busy stations – especially for travellers who do not speak the local language. And announcements are transitory, so people can easily miss the information and be stranded.'

Text displays, as opposed to graphic displays, are also problematic.

'They take time to scan and determine whether there is information relevant to you, and they are not communicating in a universal language,' Lowe said.

The project was initiated by Dr Laurence Paire-Ficout of the French National Research Institute for Transport and Safety, for the French National Railways. The research is being led by Lowe and Professor Jean-Michel Boucheix of the French National Centre for Scientific Research.

Lowe and Boucheix have developed short looped animations displayed on screens, and compared their effectiveness with static 'compartmentalised' graphic displays.

The animations are simple, dynamic graphics designed according to the animation processing model they developed from empirical investigations. Importantly, the displays can be small enough to be incorporated into existing infrastructure, such as ticketing machines.

'We're using eye-tracking studies to determine how well people process four-part animations that illustrate the cause of the disruption, the nature of the disruption, the effect on the traffic, and what actions travellers should take,' Lowe said.

'For example: first, what has gone wrong – such as repairs on the track; second, the

consequence – service cancelled; third, the implications – you can catch an alternative train; and last, the required action – graphic directions to the correct platform.'

To their surprise, they found that while the animations work very well in the French context, Australian travellers do not appear to benefit as much. Their aim now is to determine why, and how the animation design can be tailored accordingly.

The difference, Lowe suggests, might be due to French travellers having special background knowledge about the complexity of their railway system and the nature of service disruptions.

'However, visitors can be overwhelmed by the complexity of the French rail system, and not understand what to do during disruptions. Australia's rail system is relatively simple, and far less utilised, in comparison,' he said.

'Visual communication is increasingly relied on for conveying public information and it is vital that graphic messages be well designed.'

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