Tweet Owl: Printing tweets in the studio during a fully visualised radio show

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Internet of Things, Social Media, Radio, Production

Abstract
Tweet Owl is being piloted on BBC Radio 1’s “Dan and Phil request show” [3], an interactive show that blends user-generated video with a traditional request-show format.

Radio is moving from an audio-only medium to one that is "fully visualised", broadcasting an online video stream of the studio to complement the show. Online social media has become a vital tool to drive engagement with younger audiences. Live shows often read out text messages, tweets and Facebook comments during the broadcast. The Tweet Owl turns an action, a producer handing a piece of paper to a presenter, into something that can be visualised and made part of the show.

Tweet Owl is an open source, networked printer infrastructure [1] using a receipt printer connected to a Raspberry Pi [2] and custom electronics to print tweets in a fun and engaging way in the studio.

A producer monitoring social media during the show uses a web-based application to print tweets of interest. The Tweet Owl periodically monitors a print queue and when new print items are detected the 2 LED eyes start flashing and a "new message" audio file is played, in this case the sound of an owl hooting. The LEDs are also buttons, when either is pressed the queued tweets are printed out from the mouth of the owl using a receipt printer.
**Future Work**
Using this open printing network opens up the possibility of providing the audience with their own remote printer either supplied ready-made or built themselves. This can be synchronised with the show so that when something’s printed by the studio printer, it’s also simultaneously printed by other printers. Alternatively, the studio can send messages directly to home printers.

Due to the generic nature of the printer software, other applications can be built to enable more immersive audience interaction such as "drawing a request" or sending in photos.

**References**
[1] [http://gofreerange.com/printer](http://gofreerange.com/printer)
[3] [http://www.bbc.co.uk/programmes/b01971l5](http://www.bbc.co.uk/programmes/b01971l5)