Augmented reality in an iPhone app

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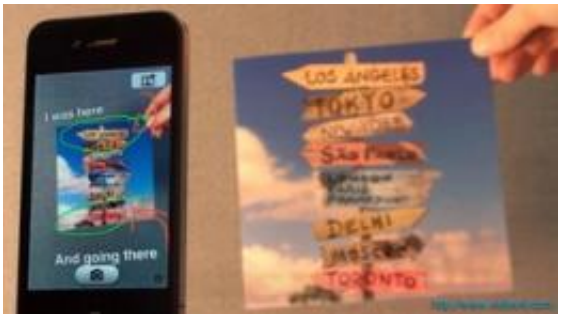

Credit: 2011 EPFL

Imagine you're in a museum, and you can point your iPhone camera to a painting or an object in an exhibit and instantly get additional information about what you're looking at. This is what PixLive, an iPhone app developed by the start-up company Vidinoti, lets you do – enrich an image with text, video, and other multimedia content.

Pixlive is an iPhone app that brings images to life. All you need to do is take a picture of an object, such as a birthday card, for example, and then add a musical extract, a personalized video, text or graphics to it, and the PixLive is ready. It can be sent in an e-mail or shared on social networking sites. The receiver opens the PixLive in the app, points the phone's camera in the direction of the card and the associated elements are instantly displayed on the screen. "The major technical advance of PixLive is to be able to visualize content instantaneously, live, without a delay. Before this, people who wanted to visualize augmented content

had to take a photo of the object and then send it to a server, which generated a lag time."

PixLive's image recognition is based on the image captured by the user. This technology is called "augmented reality," and involves overlaying various elements (sound, video, images, etc.) onto a real object that is seen through the "eye" of a smartphone's camera. In addition to personal usage, there are many ways in which institutions or companies can benefit from this technology. Using PixLive, a newspaper could show its readers a news video clip related to an article they're reading. Or a billboard advertisement could be made interactive, thus bringing additional dimensions to otherwise static content.

PixLive is an application developed by Vidinoti, a start-up company that has access to a patent portfolio and which has benefited from research and development done at EPFL.

PixLive is compatible with iPhone 3GS, iPhone 4, iPod Touch (4th generation) and iPad 2. The application is available in French, English and German.

Provided by Ecole Polytechnique Federale de Lausanne