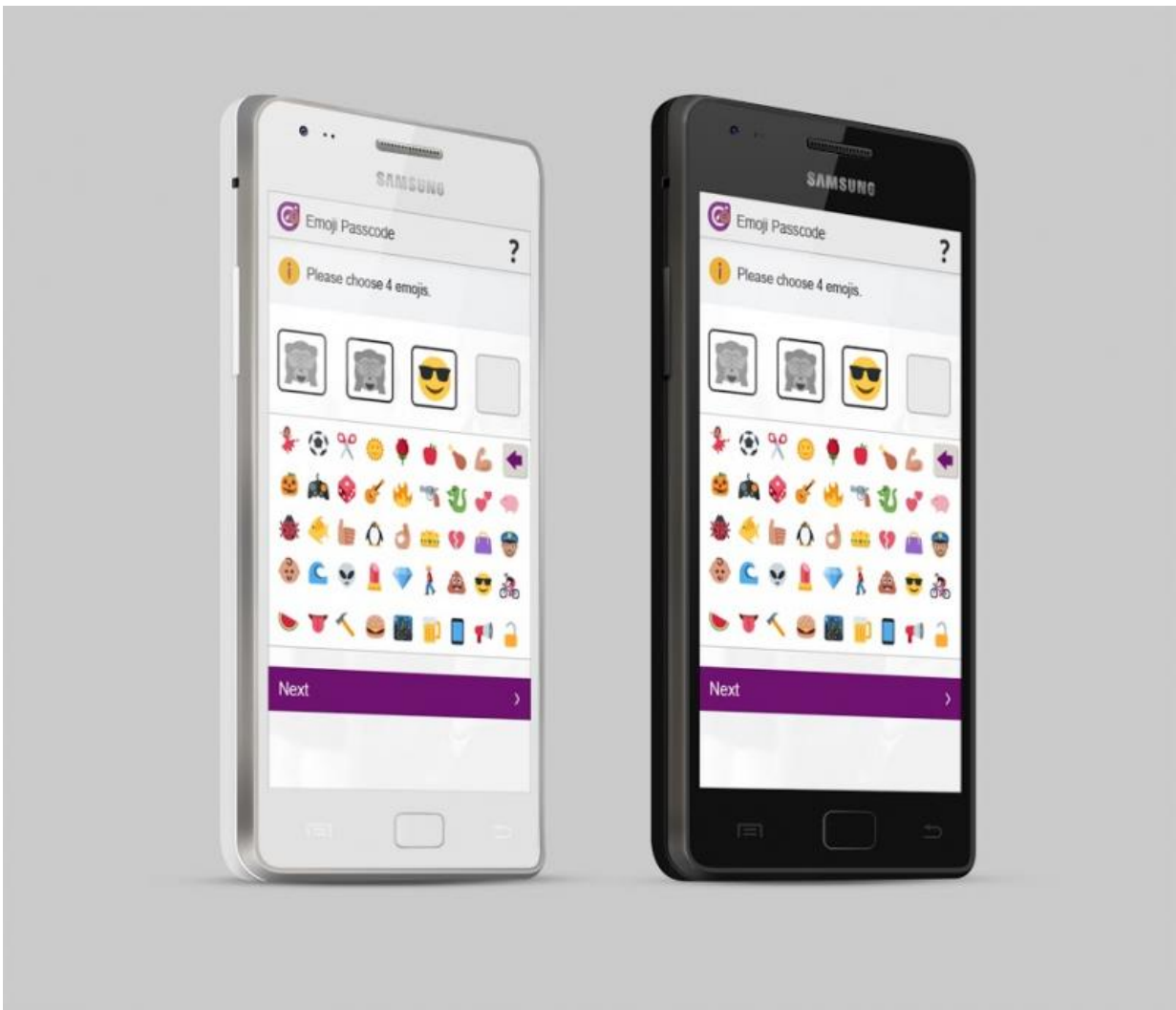


# Emoji-only passcode system aims to make online banking safer

June 15 2015, by Nancy Owano

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UK-based Intelligent Environments is a company that seeks "To lead the way financial services interact in the digital world," and has come up with an alternative to PIN codes for online banking. PINs present a twin risk for banking customers because they are difficult to remember by banking customers in safer configurations of characters and numbers and yet easy to crack in less safe configurations by thieves seeking accounts and money.

On Monday, Intelligent Environments announced the "World's first emoji-only passcode." Emoji Passcode, they said, is mathematically more secure and easier to remember than traditional passcodes.

How is it more secure, mathematically? "There are 480 times more permutations using emojis over traditional four digit passcodes," the company said. "In addition, it will prevent hackers from identifying common and easily obtainable numerical passcodes, like a date of birth or a wedding anniversary."

In a BBC report of the launch, cybersecurity expert Professor Alan Woodward said some [firms](#) were already using patterns and images as an alternative to remembering sequences of numbers and letters. He pointed out that the combinations and permutations present a would-be hacker with having to run through a number of cycles greater than they would do for dictionary attacks.

At the same time, is anything entirely safe? Woodward said he was sure "there are hackers who will work on breaking into these systems so I think it still makes sense to have some sort of two-factor authentication."

Alex Hern, technology reporter for *The Guardian*, said emoji passcodes were more [secure](#) than a traditional four-digit pin, "an absurdly weak authentication system, offering just 10,000 variations (even fewer when you account for the fact that certain common combinations, such as

9999, aren't allowed by most banks)."

In addition to security, the company believes that the mind is less likely to forget pictures than they are when coping with strings of digital and verbal entries. Tony Buzan said in the promotional video that humans' ability to remember pictures is anchored in our evolutionary history. We remember more information when it's in pictorial form, he said.

David Webber, managing director, Intelligent Environments, said the system depends on [pictures](#) only—no letters, no numbers. Intelligent Environments' Emoji Passcode enables consumers to log into their banks using four emoji characters, instead of traditional PINs or passwords. The characters are selected from a bank of 44. Webber said, "With emojis you can just think of a funny story. No one's ever going to crack that."

The company said emoji was now the fastest growing language in the UK and Webber said research showed 64 percent of "millennials regularly communicate only using emojis."

The Emoji Passcode has been integrated into Intelligent Environments' Android digital banking app, according to the company. They also said they were in discussion with banks considering rolling the technology out to customers within the next 12 months.

**More information:** [www.intelligentenvironments.co.uk/news/2015/06/15/r-bank-using-emoji-1](http://www.intelligentenvironments.co.uk/news/2015/06/15/r-bank-using-emoji-1)

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