Can you imagine having flexible computer screens and mobile phones which change shape to tell you when you have a new message? It sounds like a crazy idea, but in fact it's already been invented!

As thin as paper

In the future, the mobile phone will be our flexible friend. It will be able to change shape to tell us when we receive a message. A model called MorePhone has been created by scientists at the Human Media Lab in Canada. It's based on flexible plastic technology developed in Cambridge in the UK by an organisation called Plastic Logic. Rachel Lichten, who works at Plastic Logic, describes how the scientists there have developed a process for manufacturing flexible plastic displays which are as thin as paper. They copy the appearance of writing on paper and use a type of plastic to create layers of electronic transistors.

Screens you can jump on

The flexible screens can be any size, and are easy to read in direct sunlight. They can be black and white or colour and are very thin and light – Lichten says you can even jump on them. They use very little power, so there is no need for large batteries, and this makes them easy to carry around. Lichten says this technology could be used for heart monitoring, smart-watches, second screens for mobile phones – because the image does not disappear, your phone can keep your boarding card details for a flight for example even when your phone's battery is dying. Plastic Logic is also working with a Japanese company who make giant electronic signs.

Next generation of electronic gadgets

Plastic Logic have spent 13 years developing this new technology. Their challenge now is to help customers to think of new ways to use it. Lichten says it is always the same with new technologies. She says 'bringing new technology to the market is a challenge, especially because it is revolutionary. However, for the next generation of products, you have to know what the next generation of products will be.' Working with mobile phones or laptops that can roll up like a piece of paper could turn hardware into 'flexi-ware'.

If you're interested in science check out the British Council's science magazine called *Cubed* at http://www.britishcouncil.org/cubed.