

One of the world's most important inventions is celebrating its 30th birthday. Read the article to find out what it is.

If you're reading this, you're using a piece of technology that's celebrating its 30th birthday. It's an invention that changed the world, but which invention do you think we're talking about? The internet? The World Wide Web? If you thought they were both the same thing, then keep reading ...

The internet vs. the World Wide Web

The internet and the web are not exactly the same thing, then? No, actually. The internet has been around since the early 1970s – twenty years longer than the web. It is basically a huge network made up of smaller networks of computers. The World Wide Web is built on top of the internet. It's a way of sharing information in the form of webpages, using a kind of computer language called HTTP. That's why URLs often start `http://www` – because `http` is the language and `www` means World Wide Web. By the way, no one knows why web addresses use `//`. Even the web's inventor, Tim Berners-Lee, says these 'forward slashes' are not really necessary and if he could go back in time thirty years and invent the World Wide Web again, he would take them out.

The beginning of the World Wide Web

In 1989, when British scientist Tim Berners-Lee invented the web, he was working at CERN in Switzerland. They had computers, of course, and email already existed (Queen Elizabeth II sent an email in 1976). The idea of domain names – web addresses showing the name of the organisation they belong to (like 'britishcouncil.org') – also existed. They used hypertext to jump from one document to another, but none of these things worked together so they weren't very useful.

Berners-Lee was frustrated at CERN because all the scientists had different kinds of computers that couldn't 'speak' to each other. If you wanted information you had to remember exactly which computer that information was on and know how to use the specific programs for that computer. Berners-Lee had an idea for an 'imaginary information system which everyone can read'. He wrote a report that suggested a way of putting the internet, domain names and hypertext together into one system. His idea was so abstract that his boss called it 'vague but exciting'. Two years later, in 1991, the world's first website was built at CERN, `http://info.cern.ch` (the site you can see now is a copy made in 1992).

The digital divide

Today, thirty years later, that idea is no longer vague and is part of many people's everyday reality. The web connects about 55 per cent of the world's population to the rest of the world via the internet. But because only half the world is connected, there is a 'digital divide' between communities with regular internet access and those without. In North America, 95 per cent of people have internet access and so do 85 per cent of Europeans. Compare this with Asia, where only half the population has internet access, and Africa, at 36 per cent. In some of the least developed countries, young people are three times more likely to be online than older adults.

The United Nations says the world's least developed countries will have universal internet access by 2020. They expect to achieve this with the help of low-cost mobile phone services which include internet. This is the key to ending the digital divide. When the web is available to everyone, just like Tim Berners-Lee imagined, people everywhere can enjoy the social, educational and economic advantages it brings.