

## *Just Look How Things Have Changed*

**C**hange can be quite frightening – especially as one looks back. There is a sudden realisation that so much has changed and apparently so quickly. However, in our day to day lives we are immersed in change all the time, and we cope with it remarkably well

Most people know the story about the frog sitting in a pan of water. As the temperature of the water increases (sufficiently slowly) the frog sits there quite contentedly – until it eventually it cooks! Now, I am not saying that people have the sensory abilities of a frog, but we are immersed in an environment which is continuously changing – but we have our day jobs to contend with – don't we?

I was with a group of customers last week, and they were expressing the very modern thoughts that the Internet is finished. "Look", said one, "all the young people are stopping using the Internet." I reassured them that the young people might well be not using the Internet as much – but that is only because they have moved on to the next level of interconnection. The advent of the PlayStation 2 and its equivalent offerings from the other manufacturers offer the possibility of interconnection directly between a number of terminals. Dynamic, combative, real-time missions over the wires..... Makes plain old e-mails look out-dated doesn't it?

It was then that I took these customers back into history. For over 100 years BT, and before that the GPO and before that the National Telephone Company, were just that plain old telephones companies. They gave you a telephone on which you dialled a number. The number was translated into a routing through the network and you could talk, point-to-point across the network. And that is all you could do! That was all as a stupid little animal you were capable of doing!

And all was fine until the late 1970s and early 1980s, when personal computers were invented. Do you remember what we did to these magnificently intelligent machines? We made them dial telephone numbers, and we pushed modems into them so that they could squeak at human voice frequencies – and talk down the telephone line, point-to-point! I have news for you – computers hate being treated like humans!

What computers want to do is package their information in little IP Packets and then just spray these packets throughout a network. The machine at the other end collects the packets, orders them and hands them back to the human being – that's how machines want to work. And do be careful – IP stands for *Internetworking* Protocols – not Internet protocols... The Internet of today is only the first step on an amazingly long journey!

## *Looking at the Future Slightly Differently*

A very strange thing happened in the BT network on the 12 November 1998... That was the first time in the network that we had more data calls (that is machines talking to machines) than voice calls (people talking to people)! The number of voice calls will of course rise steadily and worthily into the future, but the number of data calls will take off like the proverbial space-rocket..... It is this type of interconnect-ability that will make all the major changes we will see in the next few years.

In preparation for this expansion, BT has already over-laid the telephone network with an IP network – so the machines already have their own network. Soon I see the plain old telephone network withering on the vine.... And we will all start talking like computers! And if the process is done well – we will not even notice the difference....

Then Voice, and Vision, and Data will cease being Three things on Three different networks and become One thing on One network... Now we humans will be able to really start communicating electronically. And as soon as there is this unleashed communication there is going to be the need for assistance and support. Maybe we should be thinking now of exactly what the increased demands are going to be placed on Call Centres in the near future. One thing is a certainty... there is going to be a greater demand, and not a reduction in the need for instant service at all times.... I see a future in which the way we work, the way we socialise and the way we live will change dramatically... and it will probably start in the home.....