

The World Wide Web - an Introduction

When the Beatles started their recording career, more than one record company rejected them before they got accepted by Parlophone; the author Robert Pirsig was turned down by 51 (!) publishers before one accepted his book Zen and the Art of Motorcycle Maintenance, which duly went on to become a best-seller; after she had become a best-selling author, Doris Lessing wrote two books under a pseudonym – The Diaries of Jane Somers were turned down by both of her current publishers before being accepted (as it happened by the same publishers who accepted her very first book). And when Tim Berners-Lee and Robert Caillau (whose mother tongue by the way is Dutch, despite his French-sounding name) submitted a paper in 1990 to a hypertext conference on their new system The World Wide Web, the paper got turned down because the system was not innovative or interesting enough.

Several of the exponential growths governing the development of the computing field have been known for some decennia such as the power of computers at a given price, and the capacity of computer memories. Others are only now becoming apparent: the speed of networks, and the price per bit for transmission over networks for instance, and apparently in part thanks to the World Wide Web, the number of people connected to those networks.

There is no doubt that the current enormous success of the Internet can be wholly attributed to the World Wide Web (indeed many people wouldn't know how to characterise the difference between the two). The success of the World Wide Web on the other hand can be partly ascribed to Zeitgeist – for instance Gopher emerged independently at around the same time, only to be subsumed by the Web and Emacs had some primitive facilities for treating the Net as if it were a filestore; partly to leverage - they were clever enough to include most of the current protocols in their system, so that there was already content before anyone had written a word of HTML; and partly to Human-Computer Interaction (HCI) – for years the arcane Internet had been the domain of the computer technologist, and then the program Mosaic (a Web browser though not the first) came along and made it all accessible at the click of a mouse.

The Web has had an enervating and synergistic effect on the computing world. It has brought networking researchers together with data-base researchers, HCI researchers programming language researchers, and many others. Now often you have to decide whether to submit a paper to the conference

on the underlying research area, or a Web conference. The pace of change has been breathtaking until recently there have been two international Web Conferences per year and researchers talk in terms of "Web years" in the same way that people talk of "Dog years" – one dog year being the equivalent of seven human years, one Web year being the equivalent of several normal research years.

The Web has rightly been called a revolution, the first computing revolution since the PC revolution. It has caused us to re-evaluate not only how we do many things within computing, but also outside it. Many predict for instance that it will completely alter the way we report research results to each other, whatever field we work in, but also in farther reaching ways, even down to the way we watch television.

We live in exciting times!

Steven Pemberton
Guest editor