



An institute for ideas

By forging links with some of the world's foremost luminaries to create an exciting new communications institute, BT is helping to set the agenda for future communications technologies.

Launched at the BT Tower in June 2004, the new Communications Innovation Institute – whose principal sponsor is BT – has brought together academics from the University of Cambridge, the Massachusetts Institute of Technology (MIT) and University College London (UCL).

Its aim is to address a range of topics that will be critical in coming years to the fast-growing UK information and communications technology industry, the growth of which is being fuelled by the rapid convergence of computing and communications technologies. By joining with other companies at the new Institute, BT is keeping its eye on the future, helping to ensure its customers will have access to the best new products and services that new technologies will be able to deliver.

Rich mixture

By combining academic expertise with the practical experience and insights of its industrial partners, the Institute expects also to tackle some of the major issues that delay the development and take up of new innovations. To help with this aspect of its work, a number of policymaking specialists have also signed up to the Institute's panel of experts.

Charged with bringing together these great minds is BT's head of strategic university research, Jeff Patmore. He said: "BT already has strong links with MIT and the University of Cambridge, and output from those relationships is now flowing out through industry to the benefit of 'UK plc'. The purpose of this new institute is to carry on with this work, focusing specifically on how the Internet will develop and exploring the problems and opportunities it will deliver for everyone in future – from businesses and individuals to society in general."

Avoiding bottlenecks

The Institute has already started to look at how the infrastructure of the internet will need to evolve to ensure it doesn't one day become so bottlenecked that content cannot get to its destination within reasonable time. Jeff added: "The internet is a great thing, and it's turned around the whole world by being so amazingly disruptive and constructive a technology. But its evolution from now on is about so much more than computer architectures. It's about the economics of operating large communication networks, the Internet's impact on the marketplace, and engineering problems such as bandwidth and storage.

“If the internet as we know it is going to evolve to deliver higher bandwidth services to an ever increasing number of users, then we’ll need to move away today’s approach, where content is typically supplied from a single source (a web site), to one that’s far more distributed. This ‘peer-to-peer’ structure is already a hot topic of discussion in the industry, and is just one example of how a new way of thinking will find us some solutions in future.”

Alliances and emotions

The Institute has already held a number of thought-provoking sessions, designed to highlight the key issues and bring them alive by means of discussion and debate. One held during September 2004 at BT’s Adaystrale Park technology centre in Suffolk saw Dr Mark de Rond from the University of Cambridge deliver a session on why strategic alliances make good business sense, and can often produce the best chances of success, given that the technology marketplace is uncertain. A previous session also invited Dr Rosalind Picard, founder and director of the MIT Media Laboratory’s affective computing research group, to speak about her current research, which is aimed at giving machines the skill of emotional intelligence, such as the recognise and understand emotion, modelled on the way humans do.

Jeff said: “The Institute will also be looking at social science issues. There’s no point us generating clever pieces of technology unless we understand the people that sit at the end of it. BT is keen to embrace this initiative and we’re engaging our best thinkers in the programme to complement our academic colleagues. There’s so much to be gained by creating a forum to bring together the world’s top thinkers in this area, and we’re encouraging other communications companies to join the programme and reap the benefits.”

“Typically, by collaborating with others, you get more than ten times out compared to what you put in. It’s the result of being able to create new ideas by bringing people with differing experiences and complimentary expertise together. We’re expecting many of the ideas we generate at the Institute will be key to the future not just of BT but of ‘UK plc’ as we move forward into the communications-intensive future.”

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