## István MARADI

Beyond the "Two Cultures" Myth: A Chief Technologist Looks at the Human Aspects of Telecommunications Convergence

We often use the word "convergence" when we talk about technologies and their effects on our everyday life. Information technologies are converging with telecommunications systems and services, fixed-line and mobile networks are converging with each other, our everyday private life converges with our professional activities. Work and our private spheres are not always separable, and a lot of that is due to the convergence of technologies. This is of course not always a negative phenomenon: being more flexible while on the move creates more efficiency, more time, more pleasure in life.

For decades we have clearly separated IT from telecommunications: but with the fast advancement of technologies, more processing power moved into our living room or into our palm than ever. This has created the possibility of shifting work from the offices to our homes, or to the times when we are on the move. Technology has the task first to bring traditionally separate networks (or services) closer to each other. We now talk on PCs, watch TV on our mobile, being instantly available (with the help of instant messages) while on the move, and control our living room's multimedia equipment from remote places.

Convergence has its own set of problems before it hits the users: how to control voice by a processor, how to store and transfer multimedia content over limited bandwidth to homes, and, finally, how to make money from convergence. Converged services are not always the killer applications from the operators' perspective: bringing voice to the PC diminishes the traditional voice revenue, making instant messaging mobile may hit the SMS traffic, and we could go on... Only a handful of converged services may stick.

But the tasks to be solved get even more difficult when we talk about users: how to make things simple, what life situation requires which solution, how to master all the fast-changing technologies? Service designers are facing not only technological issues, but they need to learn more about the behavioural aspects of the users than before. Error and trial may yield more success than well-designed and planned converged services. Nobody could have predicted the success of community sites, video sharing, online chat, or the mobile worker's environments. Does the user need video communications while on the move? Do we need file sharing in our living-room? Will I send pictures from my camera directly to my blog where it can be shared? (And will I pay for it?) All these require converged technologies, but the business models can only be seen after having the

services launched. And money invested in development first... Studies about convergence from social perspectives are more important than ever, to help technology to move where society would like to see it moving. We need to find out where convergence is coming from. Is it a wish originating with the users, to make their life simpler, or is it the next revenue generator of manufacturers or service providers in search of the next profit wave? Do we really make life simpler with all this technological advancement, or what we make simpler is made more complex by the very options that open up? Say the new multimedia TV in our living room, which is connected to the IP cloud and can be accessed from our mobile, is not working: how can the user set the parameters? Will the users accept such complexity? These are all questions behind the convergence that are worth discussing and analyzing.

István MARADI is the Chief Information Officer of Hungarian Telekom, and a PhD student at the Doctoral School in Philosophy, University of Pécs, Hungary. He had been influential in the launch of mobile services as the head of engineering at T-Mobile Hungary. His fields of research: the impact of mobile technologies on work, the analysis of mobile work, convergences in technology. Some of his more important talks/ publications: "Multimedia Content: Enabling New Growth", *Global Messaging* conference, London, 2004; "Ügyintézés házon kívül...", *E-kormányzat* conference, Siófok, Hungary, 2004; "Változó világban élünk", *Magyar Távközlés*, January 2003. E-mail: istvan.maradi@t-email.hu.

