

# A global phenomenon?

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The application of information and communication technologies (ICT) has for long time been viewed as a global phenomenon that affects all of our lives sometimes positively and sometimes negatively. This billing has been promoted by a series of opposites such as: haves or have-nots, information rich or information poor, old or young, developed country or developing country, online or offline, user or developer, computer literate or computer illiterate, local or global. A recent trawl of the world's press sheds some light on whether this is a figment or a reality.

In February 2005 The Sunday Times in Malta carried a story by Leo Brincat, the main Opposition spokesman on Foreign Affairs and IT, about the fluctuations in ICT demand around the world. He suggested that, "One consequence of the 2001-2002 ICT downturn was that countries that specialised in ICTs became even more specialised. In fact the global rationalisation of production has actually led to countries specialising in even smaller ranges of products and services." This has led to a difficult challenge for the small island of Malta in that this specialist expansion is "driven by the need for market access, growth, economies of scale and access to skills and technology". How Malta can continue to compete internationally in ICT remains to be seen.

There are many examples of where ICT has exacerbated extremes. A recent controversy of alleged Internet censorship in Tunisia was reported in allAfrica.com on 4 March 2005. A spokesperson from Reporters sans Frontières said, "[Tunisian] President Ben Ali believes that the fact that the United Nations agreed to hold a summit on the Internet in his country means the international community approves of his policy in this field. We believe that, on the contrary, the Internet model advocated by Tunisia, combining censorship with a crackdown [on dissidents], should be condemned by countries that care about freedom of expression." The article listed 23 websites that had been censored by officials of the Tunisian President. Freedom of speech will continue to be a major issue as ICT impacts increase globally. A second example was reported by The Age in Australia on 11 March 2005. "Australian recording industry investigators have raided an internet service provider suspected of having used high-speed file-swapping technology to allow the pirating of hundreds of thousands of songs and video clips." The recording industry claimed the ISP was allowing its users to exchange illegally billions of copyrighted music files each month. The ISP's defence is that it is not responsible for the actions of people using their service and software. Such intellectual property conflicts will increase as the world shrinks through ICT dependency.

ICT applications abound. A wonderful example appeared in Thailand's *The Nation* on 18 February 2005. "To provide equal access to information, the Thailand Association of the Blind has developed Daisy books as well as the TAB Player, a program to play back Thai-language books for the blind. Short for Digital Assistant Information System, Daisy is an electronic book based on a universal design standard to allow equal access to information for all. Daisy books are based on multimedia formats that combine pictures, sound and text." Biometrics has been at the application forefront for sometime. On 8 March 2005 *The Strait Times* in Singapore carried a feature on the widespread use of biometrics. The incessant march of biometrics was illustrated by the report that, "Biometrics is creeping to daily living elsewhere too. For example, at Wing Tai Holdings, biometric solutions have been integrated with state-of-the-art condominiums. The biometric systems provide access to individual units and common areas like the gym, lobbies and function rooms." However, there are international concerns about the integrity of biometrics. The 17 February edition of *The Economist* ran a feature on the use of biometrics in passports. It challenged the integrity of the technical specification of passport biometrics by the International Civil Aviation Organisation (ICAO), a UN agency. It stated that, "Passport chips are deliberately designed for clandestine remote reading. The ICAO specification refers quite openly to the idea of a 'walk-through' inspection with the person concerned 'possibly being unaware of the operation'. The lack of encryption is also deliberate, both to promote international interoperability and to encourage airlines, hotels and banks to join in." The dangers of increasing criminals and terrorist threats seem inevitable by such technical specifications.

The press continues to carry many stories about the digital divide. On 25 February *New.com.au* in Australia reported claims by the World Bank that the digital divide is rapidly diminishing. The World Bank's research had found that 50% of the world's population had access to a fixed-line telephone and 77% to a mobile network. It found there were 59 million fixed-line or mobile phones in Africa in 2002. The World Bank concluded the digital divide was on the wane, "Africa is part of a worldwide trend of rapid rollout ... This applies to countries rich and poor, reformed or not, African, Asian, European and Latin American." But not everyone agrees with this. The BT study of the UK, *The Digital Divide in 2025*, found that 51%, or the 24 million adults in the UK are excluded from ICT facilities. It forecasts that "23 million people will remain at risk of digital exclusion in the Britain of 2025." Now consider these examples of a digital divide still very much in existence.

The *New Vision* on 8 March 2005 in Uganda described the work of an NGO called Uconnect which "imports used computers from Europe and USA, revamps them and supplies them to schools and organisations. The organisation also helps them to network their computer labs and to get Internet connections. Uconnect project works to make the spread of Internet to remote areas sustainable, scalable and reproducible." In contrast the *Trinidad and Tobago Express* on 2 March 2005 ran a story about Microsoft donating software to improve access to ICT. The report explained that "thousands of Trinidad and Tobago's citizens lack the access and, more importantly, the skills they need to

participate in the new information-based global economy to realize their full potential. Microsoft is determined to dramatically improve those statistics. Microsoft believes that publicly accessible gathering places, whether they take the form of libraries, meeting rooms, schools, or community centres, represent prime locations where people can go beyond merely having access to technology and can acquire the skills to use it effectively to help themselves and their communities."

These two examples illustrate an international effort attempting to address a real digital divide. This is analogous to the world's approach to relief aid. The latter provides tools to grow and harvest crops whilst the former provides tools to farm and produce information. Both are focused on sustainability and self sufficiency. But more is needed to address issues outlined in the Kenya Times on 11 March 2005 by Raphael Tuju, the Minister for Information and Communication. He explained that, "one of the challenges in the region was on human resource development as a large proportion of the population have limited access to the information society. The shortage of ICT workers is further worsened by global migration of skilled workers and insufficient pipe lining of ICT education to potential students from primary to tertiary levels of education."

Drawing upon examples from Australia, Kenya, Malta, Singapore, Thailand, Trinidad and Tobago, Tunisia, Uganda and the UK, this brief review has shown that ICT has diverse impacts across the globe. Consequently ICT professionals have enormous influence and obligations in this new order. But do we have the wherewithal and inclination to rise to that global challenge.

Please send your views on ethical and social responsibility issues and cases of ethical dilemmas to:

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