We're Halfway There

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Today marks a milestone in the history of human technical achievement – according to WOT, the World Organisation on Technology, over 50% of the world's population now has access to a computer which is essentially permanently online. Whereas 10 years ago, access to computers was limited to a small fraction of the globe, currently China, India, North America, Europe and Russia, and large parts of Asia are permanently online. Despite these impressive achievements, the list, however, does not yet include large parts of Africa and South America. I asked Mr Manley Flinch from MacroHard consultants to assess the most striking changes that have occurred over the last 10 years, and how they affected our world today:

"One of the largest impacts on working life has been the continued increase in out-sourcing of work as larger parts of the world moved from a manufacturing to a service society. This was aided by improved communications and the growth in a vast pool of available online labour. Nevertheless, I would say that we're still in a transition phase. For instance much remote security monitoring is now done by people in poor countries - basically just cheap human labour. It's clear that it's communications rather than computer power/technology which has had the biggest impact over the last 10 years in that respect. We're still a long way from automated speech processing and language understanding since in the mid-term, communications means it's easier to get this done by a cheap human than to solve the difficult technological challenges of human-computer interfacing."

As we all know, this transition has not been without its difficulties, particularly in Europe:

"After the 2013 French revolution, everything changed. The desire to protect the old ways and maintain security into old age polarised society in France. The mistake that people constantly make, throughout history, is to attempt to maintain the status quo. Society and politicians need to learn to embrace change as a deep rooted human desire, whilst at the same time solidifying the basic securities that people expect in an increasingly wealthy society."

Easier said than done, perhaps. With this flexibility in the labour market, the old system of cash based payments clearly was clearly doomed:

"The effective end of cash in 2012 was a major milestone. Everything now is just numbers! Cryptography has enabled everyone to make payments real easy and to prove that a payment has been made. The PayCryptTM system was an invention of pure genius – this did away with money virtually overnight."

Whilst technology has clearly resulted in major social implications, not all of them have been detrimental:

"For sure! The dramatic expansion of education was awesome. Both the Virtual Campus technology and Virtual work place have empowered access. Now the world really has access to a vast resource of talented people out there. Several fundamental mathematical challenges have been solved, as have the challenges in theoretical physics. This was really to do with opening up the world, and giving people a chance."

Whilst now commonplace, it's hard to imagine how rigid were the ideas of the working place even only ten years ago:

"Sure. With the idea of virtual teams of extremely talented people from around the world to solve challenging tasks, the idea of rigid affiliations to a university/company became less relevant. The smart kids now are making a killing since their talents are readily accessible, and everyone knows their contributions. Similarly, management has radically changed from getting the best out of your team to being smart at quickly assembling the right virtual team."

Paradoxically, perhaps, increased virtual communication is ultimately behind the new cafe-culture.

"A key point that futurologists missed is that people still like to meet face to face. Technology can facilitate this, but not replace it totally. People may now be able to work from anywhere, but they still crave their daily real social interaction. That's where the cafe-culture came in. Now StarCafe claims that over 30% of the workforce work from its cafe's, mainly thanks to it's super high band width and great coffee!"

Whilst difficult to imagine now, clearly one of the major has been in the media:

"It's funny to think back about it now. In the old days, the BBC had what, like a 1000 cameras or something. Now almost everybody has a camera. Media changed from filming it to sifting through the vast quantity of available material to quickly pull together what might be of interest, such as achieved by the Internet Broadcasting Corporation. Some people thought that personalised news would spell the end of news corporations, but what the futurologists got wrong was the point that people like to know what everybody else knows!"

The pace of change has been impressive, although many other problems remain. I asked Manley Flinch what are the main challenges he sees in the future:

"With the current excitement about the Lunar Programme, on a much longer timescale, the ultimate limitation is the speed of light. In the future, people will view communication which can be essentially real-time to be the limits of true social interaction. This is easily achieved on an earthwide basis. Hence, in the future, any intra-earth connections will be perceived as essentially 'real', and only those for which the delays of limited light speed will appear 'unreal'".

So much for communication, but what about the revolution that we all are waiting for in terms of human-computer interfacing:

"Progress in that area has been disappointing. Only recently can we realistically expect to make progress in machine understanding of its environment – this just requires a huge amount of processing power compared to what was previously available. In the meantime, communications just rushed ahead regardless – not to mention the current excitement about genetically adapting organisms to perform human-like tasks. I think we're getting there in terms of true human-machine interaction, but I wouldn't hold my breath. We're certainly not even close to being halfway there yet!"