

Straight Talking - The perfect device for the developing world is not a PC

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As a person inhabiting what is commonly called a developed country, I'm used to computers being a central part of my life. However, for less well-developed countries, the idea that the computer will be the universal device just doesn't sit well with the realities of daily life.

At this stage, many countries just don't have the advanced infrastructure required for a full computing experience: they lack connectivity, hardware and software distribution networks and stable power.

Also, many dwellings in developing countries are not capable of keeping out harsh environmental conditions such as the damp of a monsoon or the ever-present fine dust of deserts.

Yet many people still try to fit the computer into these markets, looking to maximise computer ownership as the main access device for an ever-increasing proportion of the six billion-plus global population.

Granted, the number of people who own a PC is going to increase, and it will tend to increase faster in developing countries than in the saturated, developed markets. But the computer doesn't have to be the main device for the majority. There is a far more common device - the mobile phone - that is increasingly being used in developing environments in ways that span from the simple yet effective, to the complex and amazing.

Here are some great examples of how developing nations are already taking advantage of the mobile phone.

- The nomadic herdsmen of the Masai Mara have been suffering from livestock being eaten by lions - and thus have been killing more and more of them, to the point where the existence of the iconic animal is threatened. The charity Living

With Lions (LWL) has set up a programme called Lion Guardians in which the Masai place tracking collars on the local lions. Then, using handheld devices, a small group of Masai can keep tabs on where the lions are and ensure that the herdsmen and livestock are kept away from these areas. As a result, the Masai now live peacefully alongside the lions, and are seen as helping to maintain the lion population, which then brings in money through tourism as well.

- In many developing countries, the reality of a bank exists for few people. Indeed, the Consultative Group to Assist the Poor (CGAP) estimates that 80 per cent of people in the least developed nations do not use any banking services at all. The use of micro-banking tied to mobile phones has been shown to be up to 30 per cent cheaper than other methods - and enables many poor people to join in with financial transactions where they may well have been excluded in the past. The Wizzit bank in South Africa, for instance, has such a capability, with account holders able to transfer money between themselves using mobile phones.
- Microfinance organisation Kiva noticed that Peruvian Kiva borrowers were making money by allowing their mobile phones to be used by people in the street who did not have their own device. This aggregated usage enabled the borrowers to get special call deals, and also gave Kiva an idea. If this aggregation worked as a business proposition, it could also be made to work for group microfinance initiatives. Thus a community can now use a single mobile phone to arrange aggregated microfinance deals and repay them. At the same time, the phone works as a communication tool to maximise the community's capabilities to build their business propositions.

- The United Nations Foundation, the Rockefeller Foundation and the Vodafone Foundation are working together to enable mobile phones to be used for healthcare improvements in India, South Africa and Uganda via the launch of the Mobile Health Alliance (mHealth Alliance). Two examples: Project Masiluleke in South Africa is an SMS-based HIV/AIDS education and hotline service. And Cell-PREVEN in Peru uses mobile phones to connect decentralised groups of healthcare professionals, who can now call each other and share knowledge as they visit communities.

The benefits of the mobile phone in developing countries are manifold. It's wireless so less physical infrastructure is required for connectivity. The phone itself is lower cost than a PC. It is self contained and has a generally higher level of environmental resistance than a PC. It uses less power than a PC, and is not dependent on being tethered to a mains power outlet. Batteries can be charged in vehicles or other 12V DC outlets, via small solar chargers, or at a central location.

Basic phones are capable of receiving and sending text messages; while more advanced models can browse the web. Whereas the recycling of PCs has struggled due to high costs and security concerns, the recycling of mobile phones is simple and cost effective.

As a means of increasing reach and enabling remote communities to explore new means of empowering individuals and groups, the mobile phone looks like a far better bet than the PC at this stage.

The PC will still have a place - probably as a centralised resource held within a community elder's property, or in a community meeting place, or as an educational platform in schools. But the phone can be the individual's device of choice, and fits in with the needs for portability, for low cost and basic ruggedness.

About Quocirca

Quocirca is a primary research and analysis company specialising in the business impact of information technology and communications (ITC). With world-wide, native language reach, Quocirca provides in-depth insights into the views of buyers and influencers in large, mid-sized and small organisations. Its analyst team is made up of real-world practitioners with first hand experience of ITC delivery who continuously research and track the industry and its real usage in the markets.

Through researching perceptions, Quocirca uncovers the real hurdles to technology adoption – the personal and political aspects of an organisation's environment and the pressures of the need for demonstrable business value in any implementation. This capability to uncover and report back on the end-user perceptions in the market enables Quocirca to advise on the realities of technology adoption, not the promises.

Quocirca research is always pragmatic, business orientated and conducted in the context of the bigger picture. ITC has the ability to transform businesses and the processes that drive them, but often fails to do so. Quocirca's mission is to help organisations improve their success rate in process enablement through better levels of understanding and the adoption of the correct technologies at the correct time.

Quocirca has a pro-active primary research programme, regularly surveying users, purchasers and resellers of ITC products and services on emerging, evolving and maturing technologies. Over time, Quocirca has built a picture of long term investment trends, providing invaluable information for the whole of the ITC community.

Quocirca works with global and local providers of ITC products and services to help them deliver on the promise that ITC holds for business. Quocirca's clients include Oracle, Microsoft, IBM, O2, T-Mobile, HP, Xerox, EMC, Symantec and Cisco, along with other large and medium sized vendors, service providers and more specialist firms.

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