

Mobile phones and development

The future in new hands?

'Explosive' is the only way to describe mobile phone growth. Half the world's 6.5 billion people now use a mobile (up from two billion just two years ago). There are more than twice as many mobile owners in developing countries as in industrialised countries. Subscriber growth rates in developing countries are 25 percent per year – and double that in Africa.

More and more development workers tell stories of mobile surprises – not just who is using them, and where they are using them, but also how they are using them. Through mobiles, the first digital information and communication technologies (ICTs) have reached poor households and communities. In less than a generation, the majority of poor people will have access to mobile phones and services.

What difference will this make? Mobile ownership brings two types of benefits.

Incremental benefits improve what people already do – offering them faster and cheaper communication, often substituting for costly and risky journeys. Evidence is diverse – from fishermen in Kerala, India, earning more money and wasting less fish by phoning different

coastal markets, to improved relief planning in the wake of recent Peruvian earthquakes.

In this issue of *id21 insights*, **Ananya Raihan** describes use of mobile phones to deliver information to Bangladeshi villagers, often to those from particularly-excluded groups or locations. This has helped them solve a variety of problems – mainly related to health and agriculture – that would otherwise have been costly or difficult to address.

Transformational benefits offer something new – new ways to access services and support livelihoods. Evidence on this is only just emerging because it relies on a mobile's ability to be 'more than just a phone'. **Jonathan Donner** summarises one area of promise: 'm-banking', which is allowing wider access to banking and other financial services.

In addition, there are **production benefits** that come not from using but from selling mobiles and related services. One of

Making a call at a phone booth run by Douglas Oduori in Funyula, Kenya. He operates a handset which is modified to function as a Global System for Mobile communications (GSM) wireless phone. The area recently received mobile phone coverage, so telecommunications companies, including Celtel and Safaricom, are fighting for a share of the market
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the best known examples is the creation of new livelihoods for women running each Grameen Village PayPhone in Bangladesh. Many others worldwide are also making a new living through activities like re-selling airtime and prepay cards, or even selling ringtones and phone covers.

As with all technologies, where there are benefits, there are also inequalities. As we talk of the 'digital divide', so we can talk of a 'mobile divide' between people who have mobile phones and those who do not. There may also be inequalities amongst people who have phones, because of the social context into which all new technologies are introduced, and by which they are shaped.

Daniel Miller reports on the various impacts of mobile phone use on different groups in Jamaica. Those already employed, in some cases, use mobiles to make money by selling more of their goods and services. By contrast, those who are unemployed use their phones to try to get money by 'link-up' with broad social networks.

Abi Jagun shows that mobile ownership has benefited producers in Nigeria's informal textile sector, increasing their trade at the expense of those who lack access to mobile telephony. But she also describes how those in powerful positions in the supply chain are strengthening their position through mobiles. Likewise, **Kutoma Wakunuma** traces the interplay of mobiles with husband-wife relations, describing how phones have become a new means for expression of an old story: the oppression of women by men.

And, as with all technologies, there is hype and then there is the reality. The growth and potential impact of mobiles are phenomenal. Mobiles can be seen in action, for example, helping deliver on every one of the Millennium Development Goals – including poverty, education, equality and

health. But technology has limits. Some limits are imposed by the social context. Others are imposed by the 'physicality of development': we cannot reduce all of development into the bits and bytes that mobiles handle. Actual money must still be transacted; face-to-face meetings must still occur; and real goods and infrastructure must still be produced and used. What we expect of mobiles must therefore have limits.

In mobile policy and practice, as well as limiting expectations, we should also recognise the lessons from existing work – on telephony, on ICTs, on communications, and on development more generally. At the project level, this means adopting good practices such as involving users and matching designs to local realities.

At the policy level, lessons are urgently needed because many development actors are 'playing catch-up':

- Governments – too focused on fixed-line telephony – are only just appreciating the reality of mobiles' domination of the field.
- Most donors and international agencies – obsessed about rural telecentres often based on unsustainable European models – were caught unawares by the popularity of mobiles.
- Only private firms have been paying attention, getting on with the business of addressing demands and needs.

Tim Kelly discusses some of the policy lessons that should be learned. Liberal

policies and private business will work for the majority of mobile service delivery. But they must be combined with government intervention and regulation to ensure the poorest people are not excluded.

Development actors must also plan for the future. To date, mobiles in developing countries have been understood mainly as a means to provide connectivity: the promise of fixed-line telephony finally delivered to a mass market because mobiles have better fit (to needs, income and culture), better functions, and different corporate strategies and government policies.

Mobile phones are more than just a fixed-line alternative, however. Policies and strategies must now recognise that they are also:

- Mobile – this 'communications on the move' means people can engage in development activities that previously would not have been possible. For example, although mobile phones enable state surveillance, to what extent can they also allow citizens to monitor the state (see box on page 4)?
- Multi-functional – what are the opportunities, now that many of the world's poor communities have access not just to a phone but to a camera, calculator, audio player, video player, timepiece and – soon enough – a platform for email and Web use, all built into one device?
- Cross-functional – they bring together

services that cross existing boundaries and present governments with new decisions. How, for instance, should they handle the overlap between telecommunications and financial regulation now that mobile phones allow airtime to be used as currency?

The implications of all these cannot be understood simply by generalising from past research on other ICTs. Governments and others need to build specific knowledge about these new capabilities.

We have heard about the 'information revolution' and the 'digital revolution' in development. Tempting though it may be, we should avoid talk of a 'mobile revolution'. Yet this is also more than just a 'mobile evolution' – for the next decade or more, we will continue to be surprised by the ways in which these new technologies interact with development processes.

Richard Heeks and Abi Jagun

Development Informatics Group, Institute for Development Policy and Management, School of Environment and Development, University of Manchester, Manchester, M13 9PL, UK

richard.heeks@manchester.ac.uk

abi.jagun@manchester.ac.uk

See also

Mobiles and Development: Infrastructure, Poverty, Enterprise and Social Development, UK Development Studies Association 'Information, Technology and Development' Study Group, workshop summary and papers, 2007

www.sed.manchester.ac.uk/research/events/conferences/mobile.htm