

m-Development: Current Issues and Research Priorities

This briefing summarises some key issues and research priorities emerging from the workshop on "Mobiles and Development" held at the University of Manchester in May 2007. The workshop was a meeting of the UK Development Studies Association's "[Information, Technology and Development](#)" study group. It was organised by the University's [Development Informatics Group](#) with the support of the [Brooks World Poverty Institute](#).

m-Development Issues

The Mobile Explosion. There are more mobile than fixed lines in the global South. There are likely more mobile phones in the South than the North – one reason "m-development" should be higher up the "mobiles and society" agenda. Mobiles have a one-per-user model in the North, but shared-access models in the South. Thus perhaps three or four times more people in the South have access to mobile services than in the North.

The Continuing Mobile Divide. We should take care not to go completely overboard with the hype. Yes, mobiles are now reaching into the poorest communities and livelihoods. But, there are still global and national inequalities. There is still a "mobile divide". Fundamental issues – electricity, coverage, affordability – are still access barriers.

Role of the Private Sector. The state and NGOs have a vital role to play in promoting those aspects of m-development the private sector will not or cannot. However, as a generalisation, the m-development activities of the private sector – e.g. m-banking, mobile infrastructure and services – seem to be working better than those of the public sector – e.g. m-education, landlines. We can ask – which sector holds most responsibility for the mobile explosion – public, private or civil?

Making Connections, Flattening Asymmetries. In their role as communication devices, mobiles are making connections for users. For example, linking poor communities to members of the global diaspora for the purposes of remittances. And mobiles are flattening information asymmetries. For example, providing previously-inaccessible information about education, health, agriculture, and market prices. The world may not yet be flat due to mobiles. But it is getting flatter.

Needs and Wants. Development actors often talk about needs of citizens and communities, but not about their wants. Mobile clearly fits into the "wants" category for many. Because of its modernity, because it is an aspirational good, the cell phone is becoming a delivery mechanism of choice for many in developing countries. They want projects that deliver via mobiles regardless of what they may, top-down, be deemed to need. We are still finding our way through to what mobiles deliver in terms of development needs, but there is growing evidence on this too.

Convergence. There are two aspects, both about mobile being able to do what other technologies or services do. First, technically, mobiles can increasingly do what PCs or community radio can do. Will this lead to complementarities or tensions? Second, in relation to socio-economic processes and responsibilities. For example, over m-finance, telecoms and financial regulation are colliding as cell phones become mobile banks using airtime as currency.

From Communication to Transaction. Mobiles to date have largely been seen through a "telephone lens" – as communication devices. Increasingly, though, we will need to see them through a "laptop lens" – as devices that can process data and can handle transactions. To understand mobiles in development, can cannot simply cut-and-paste from past telephone/telecommunication studies.

ICT4D 2.0. If the epitome of ICT4D version 1.0 was the rural telecentre, are we seeing emergence of ICT4D 2.0? Its artefact: the cell phone. Its focus: urban not rural development. Its emerging trend: revival of the Internet as a development tool through GPRS (and – for laptops and PCs – through the roll-out of free WiFi networks). Its catchphrase: Digital Cities for Development.

m-Development Research Priorities

What might be our coming research priorities for "m-development"?:

1. **Delivering on m-development:** still a lot of work to be done mapping and planning how to "build development" on the digital platform that mobiles are providing.
2. **Understanding social networks:** poor citizens and communities face key problems of lack of effective social capital, and of social exclusion. How are mobiles changing this?
3. **Beyond calls and texts:** what are the new possibilities being opened up by – other mobile devices (PDAs, iPods, etc); ability to transact as well as communicate via cell phone; GPRS and WiFi roll-out?
4. **Innovation:** around mobile devices, who is innovating; what are they innovating; what are the issues they face; how do we capture, disseminate and scale-up? Three possible locations: "traditional innovation" e.g. in university/laboratory-type institutions; "semi-traditional innovation" in technology enterprises e.g. small IT and software firms; "non-traditional innovation" by users (hardest to capture but perhaps the most interesting).
5. **Design:** what is the match/mismatch between the design of m-development applications, and the realities of the communities and livelihoods into which they are being introduced? What design and implementation lessons should we learn from past work in information systems and technology studies, and in development studies?
6. **Convergence:** what are the developmental implications of the convergence of technologies? What are the policy implications of the convergence of socio-economic process and responsibilities that mobiles enable?
7. **Environment:** what are the environmental implications of infrastructure construction, phone recycling from North to South, phone use, phone disposal?

Conceptualising the artefact. For any research, we need to be more rigorous about "conceptualising the artefact". What do we see as the specific role of the mobile technology we are studying? What is the difference that mobile technology – the bundle of hardware and software applications (and their related socio-economic processes) – is making? Contenders:

- Reach: as a technology that penetrates farther than others.
- Economic model: as a technology that is more affordable than others.
- Mobility: as a technology that that is more mobile than others.
- Texting: as a technology that can SMS as well as call.
- Other technical functionality: as a technology that permits other functions, e.g. the storage and exchange of airtime.

Richard Heeks & Abi Jagun, May 2007
richard.heeks@manchester.ac.uk