Mobiles for development in Africa: Are we in danger of losing sight of the bigger picture?

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Introduction

Many of us have come across literature that has rightly indicated that mobile-phone access as a technology has leapfrogged other technologies such as the internet in Africa (James, 2009). That this is the one technology that has spoken to the technological needs of Africa and that there are more people who are able to and have access as well as use mobile phones than there are users of the internet (Rashid and Elder, 2009). In addition, there are numerous examples that indicate that it is the mobile phone that is now getting particular attention in terms of encouragement of its use and access especially in Africa in addition to it being seen as a potential tool for social and economic development and growth. For example, the expenditure on ICTs in Africa was in excess of US$60bn in 2010 (Heeks, 2010). Heeks further reveals that ICT-related investment development, for instance from the World Bank, is about US$800 million per year while that of the private sector in relation to mobile telephony is about US$10 billion. It is clear that mobile telephony is the one technology that Africa as a developing continent has embraced more than any other technology in recent history. For instance, according to the ITU (International Telecommunication Union, 2008), one out of four people in Africa have a mobile phone while the same cannot be said of the internet where only five per cent of the population is online.

For the most part, the mobile phone has gone beyond being used as a tool for easy and everyday communication (de Bruijn *et al*, 2009) to a tool that is service orientated, offering services such as agriculture information (Duncombe, 2012), health care (The Economist, 2011; Fjeldsoe *et al*, 2009; Wakunuma, 2008), civil advocacy and political activism (Ekine, 2010) as well as mobile banking sometimes known as m-banking (William and Tavneet,

2011; Porteous, 2006) as seen in Kenya's M-Pesa and now Zambia's Xapit which enables the quick transfer of funds, enables the buying of credit and paying bills among others. Aker and Mbiti (2010) highlight five possible mechanisms through which mobile phones can provide economic benefits, which include access to and use of information, increased communication, creation of new jobs and the delivery of services.

Gender and mobile phone access

Despite the uptake and seeming ubiquity of mobile phones in Africa, there are evident gender differentials in the access as well as use of this technology. Wakunuma (2006, 2007, 2009, 2012) has highlighted these differences in access, in power and control which in some cases have resulted in violence against women. In writing about shared use, Burrell (2010) shows how while shared use of mobile phones may be practised, that preferential access may still exist, leading to certain groups – particularly women – excluded from having access at all. The reasons for the disparities between women and men's access and use of mobile phones particularly in the developing world include literacy, culture, as well as cost (GSMA, 2013b). Lee and Lee's study (2010) has also shown that there is a higher use of mobile services by men than by women particularly when it comes to services related to business and finance.

To overcome such differences, several initiatives which also show the perceived importance with which the mobile phone is regarded can be seen through international organisations and aid agency projects that effectively promote the use of mobile phones for development, especially for women. For example, only recently the GSMA, a global association representing interests of mobile operators launched an Innovation Fund for NGOs in sub-Saharan Africa and Asia offering grants for NGOs and social enterprises in partnership with mobile phone operators. The grants, valued up to about US$140 000 are intended for the participants to design and launch products, value-added services, marketing campaigns and/or distribution mechanisms that will increase women's access to and use of mobile and life-enhancing services (GMSA, 2013a: 10–11). A further example is that of Asiacell's initiative aimed at blocking potential harassers of women and for women to choose suitable off-peak hours or Etisalat's initiative aimed at providing services for healthy pregnancies (GSMA, 2013b). The United Nations Educational, Scientific and Cultural Organization's (UNESCO) capacity-building programme for rural

Pakistani women teachers working in the field of Early Childhood Care and Education who have resources uploaded to the Nokia Education Delivery platform is another initiative to promote women's use of mobile phones (UNESCO, 2013).

Are we being too narrow in focus?

When we look at the above analysis and consider the fact that by and large mobile phones are being touted and seen as tools with the potential to drive economic development and growth for Africa and overcome gender disparities, are we losing sight of the bigger picture or being too narrow in focus? Of course the author appreciates the importance and capacity of mobile phones but is fearful that we are becoming too fixated on this one technology and limiting our focus to encourage and expand initiatives to other technologies and aspects that should go in tandem with mobile phones. Consider the importance of having internet access which is crucial for economic growth (Koutroumpis, 2009) or the need for having access to computers. Granted, a mobile phone is a computer but the author is looking at computer access in the conventional sense; such as a laptop or a PC in this regard, or being able to effectively partake in social media by all, whether women or men or whether in a rural or urban setting. Should the focus not be multidimensional, in which case we have to look beyond the mobile phone and its perceived potential? For example, as is noted by Czernich *et al* (2011), the internet is important for economic growth and robust internet broadband infrastructure has had an impact on the economic growth especially of OECD countries. If this is the case, Africa has a long way to go, particularly when we consider that mobile-broadband penetration "only reached 4%, compared with less than 1% for fixed-broadband penetration while that of the developed world especially Europe leads in broadband connectivity, with fixed and mobile-broadband penetration reaching 26% and 54%, respectively (International Telecommunication Union [ITU], 2011). In addition, ITU states that internet speed also matters. For Africa, which according to the ITU has 2 000 bits per user compared to around 90 000 bits of bandwidth per user in Europe may prove problematic and potentially hamper its economic growth. Admittedly, Ndung'u and Waema (2011) point to a rising internet use via mobile phones, however, this is nowhere near enough if Africa is to strive for economic growth such as that enjoyed by more developed countries. This is more so when we also consider Eagle's (2010) reasons for low mobile internet

penetration as being due to the high cost of internet access and mobile phone gadgets that can enable mobile internet platforms. As the ITU (2011) further attests, "the availability of bandwidth and capacity will increasingly determine the use and beneficial impact of ICTs" (p.iii). For this to happen, a few things need to be addressed, which include cost, education as well as infrastructure among others.

Curwen and Whalley (2011) suggest that communication infrastructure development has to move beyond the urban setting to the rural setting as well without which there will be limited penetration of services needed for growth. In sub-Saharan Africa, like in Zambia for example, the development and as a result penetration of mobile internet infrastructure is almost always concentrated along the line of rail, which mainly caters for the more developed urban areas. This, the author imagines, is the case for most African countries and as a result could impact on adequate internet mobile penetration particularly for rural areas.

The role of gender in the midst of it all

Having considered the above, the role of gender cannot be over-emphasised. It is an important one which needs to be looked at beyond mobiles for development alone to a multidimensional focus. Various reasons account for gender differentials in accessing and using technologies. For women in particular, they are more impacted by the lack of proper education and training in the area of technologies, the high costs of such technologies, concern for other more pressing issues such as food, education and shelter. These issues are ingrained in the existing social, economic, political and cultural structures that have resisted gender equality for a very long time.

The fact that cultural values and practices are often biased towards men (Gurumurthy, 2004) and men's assertion of power and control by deciding when women can use mobile phones or even whether they can at all (Wakunuma, 2012) suggests a need for concerted efforts beyond mere mobile phone initiatives. Resolving such imbalances will require a political change in attitude simply because it calls for a reflection of and subsequent change in power relations in order for women's needs, aspirations and interests to be realised. In reaching a similar understanding about women and technologies, Bhattacharjea (2005) points out that women's lack of access, particularly in developing countries, is partly a result of poverty and the unequal status of

women to men. Therefore, in order to overcome this situation and improve women's access and use of technologies like mobile phones and other aspects, their situation needs to be understood as a linkage between women's human poverty, globalisation as well as gender inequality. For women, especially the poor and those in rural areas to seriously participate in mobile phone access and use beyond mere social function, such as simple communication, but also to have a sense of the economic potential that such technologies have, much lies in the inclusion of their experiences and needs in ICT policies (Jorge, 2006).

So although there is evidence of projects specifically targeted at women, there also ought to be robust regulatory policies that can ensure that women can afford the mobile technologies that allow them to move beyond mere communication to education as well as to those aspects that can lead to the creation of jobs. Jorge (2006) has also pointed to the need for "licensing regimes that favour companies with gender-equality policies, and programs that consider women's needs and realities" (p.74). These should be seen as important and non-negotiable considerations in not only ICT policies but in education access, job availability, health and even recreation so that women can be a true part of economic development, including that of the mobile phone development process. The problem though, as Jorge concedes, is that although policies may mention gender equality concerns, in most cases they are not followed through at the regulation and implementation stage and thus remain merely as desirable add-on. Take the example of the 2003 African Information Society Initiative (AISI), which sets a framework to develop and establish a sustainable information society by the year 2020, and in the process sets out its gender concerns across different points. Point H (40) for instance reveals how women generally have more limited access than men when it comes to technology as well as information, media and other communication facilities. Point H (41) goes on to state the opportunities that may come as a result of using technologies. The AISI resolution indicates that women's rights can be improved and that equity between men and women can be a possibility if and when ICTs are used. In a similar fashion, the Zambian ICT policy as an example also makes a case for gender equality in the use and access of ICTs. However, what is not explicit in both AISI's resolution and Zambia's documentation is what measures policymakers will put in place in order to ensure that gender concerns are met (Wakunuma,

2010). Merely outlining the gender problem, especially, as it relates to women and the advantages that technologies can bring to them, does not seem adequate enough. The policies do not indicate how a gender balance will be mainstreamed in order to overcome the problems women face so that they may subsequently enjoy the perceived ICT advantages and other elements that are needed for economic growth that include health, education, shelter, food among others.

As such, it would seem that more needs to be done to achieve the desired potentials of ICTs which as an umbrella term encompasses mobile phones, internet, mobile-broadband, social media and many more. This is more so if we see such technologies as playing a major role in meeting some of the Millennium Development Goals (MDGs) that count the inclusion ICTs in the achievement of the MDGs as we count down to 2015. As the United Nations (2013) MDGs report indicates, when it comes to the use of ICTs like the internet in the developing world, the gender gap is far more pronounced than the rest of the world with 37% of women and 41% of men using the internet globally while only 29% of women in the developed world use the internet compared to 41% of men. The report goes on to state that fixed broadband penetration is below one per cent in sub-Saharan Africa. In their review of ICTs for development and in particular mobile phones, Hossain and Beresford (2012) fear that although there may be a concerted effort to deploy ICTs, particularly in rural areas, if the efforts do not address the causes of gender inequality, ICTs like mobile phones will fail to lessen and/or end the gender divide because the technologies are usually beneficial to men. This is more so because marginalised groups in rural areas of Africa for example account for 65% of the population of which 50,9% are women. In this regard, it will be interesting to see how technologies like mobile phones can help lessen the gender gap as well as improve social and economic development.

Conclusion

Although there may be potential for social and economic growth in Africa as a result of mobile phones, the focus needs to be broadened to include other factors such as gender equality in access, improved internet broadband and computer access, robust regulatory policies that can be fused together in order to have a more comprehensive and realistic social and economic growth outcome. In addition, there ought to be more emphasis and effort

by international organisations and aid agencies to move their focus beyond a single technology and combine other elements to alleviate the economic difficulties faced by people in Africa, especially women. The alleviation of problems like poverty and hunger, education, health, shelter, jobs among others will need much more than a fixation on one technology just because it appears fashionable and the "in thing" to concentrate on. It will need a multidimensional effort that includes and speaks to other factors beyond the mobile phone and the initiatives in place because the old traditional social inequalities persist despite technologies like mobile phones being somewhat ubiquitous. Thus, issues of gender remain implicated and important in discussions beyond the potential of technologies like mobile phones in achieving the development agenda. In addition, issues such as access and use are much more complex than often imagined, hence the need for a multidimensional view.

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