Lifting the gender veil on ICT indicators in Africa

Despite the rhetorical undertaking of governments and multilateral agencies, there has been little systematic collection of sex disaggregated data on ICT access and use and even less which analyses the descriptive data which exists. Without such analysis descriptive data is not only incomplete but can mislead policy makers on the correct points of policy intervention aimed at encouraging greater gender equity in ICTs. This sex-disaggregated overview of ICT access and use across 11 African countries confirms the findings of the few systematic national and multinational studies in this area that women and men are not equally able to access and use ICTs. It goes further to demonstrate that this increases as the technologies and services become more sophisticated and expensive requiring greater levels of income and education to access and to operate. Modelling of the nationally representative household and individual survey data however, demonstrates that this is not a result of anything inherent in ICTs. The reason for this inequality relates rather to women being more concentrated among lower income groups, lower education levels and in rural areas, or more generally what has become referred to as the 'base of the pyramid'.

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Less access to and sub-optimal use of ICTs

Women generally have less access to ICTs and use them sub-optimally and this is compounded as technologies and services become more sophisticated and expensive.

Gender inequality greater among internet users

Internet use in general and by gender increased between 2007/8 and 2011/12. But there are more men than women using the internet in the majority of the countries analysed.

Education inequalities between men and women affects their access to and use of ICTs

The gap in education persists, with women having a lesser chance of being educated and this gap widens at higher levels of education and their exposure to the skills required to access certain ICTs.

Gender disparities in income impacts ICT adoption

In general women are less involved in revenue generating activities and therefore earn less, which in turn impacts on how they access and use ICTs.

Introduction

The 2010 Gender and ICT study found in comparing ICT access and use between men and women of similar backgrounds, primarily by controlling for education and income, that the sex differences were significant in only a few of the countries.

Pursuing this masking effect on gender in a study of 11 African countries found that men and women are not able to access and use ICTs equally and that the fundamental reason for this lies in the gender disparities found in income and education.

Income and Education

The analysis show that income and education are key determiants of access and use of ICTs. The gender gap increases as the technologies and services become more sophisticated and expensive, requiring greater levels of income and education to access and to operate. The analysis shows that on average, women earn comparatively less than men.

Fewer women than men have tertiary as their highest level of education and this difference is wider in Ghana, Kenya, Nigeria, South Africa and Uganda. The majority of the countries also have more men than women completing secondary and primary levels of education, emphasising the continued gender gap in education.

It is mainly this underlying gender gap in income and education, that contributes to the exclusion of women in the information and communication technology domain.

Gender gap in ICT access

Mobile Phone

In comparison to the 2007/8 figures, there has been a tremendous increase in mobile ownership among the adult population and across gender. Though the share of adult individuals with mobile phones in Ethiopia (18%), Rwanda (24%) and Tanzania (36%) can still be considered relatively low, these figures went up by about 15% in each case between 2007/8 and 2011/12. The adoption of mobile phones among women supersedes that of men in Botswana, Namibia and Cameroon. Despite this increase, the gender gap still persists.

The data shows that in most of the countries, except in Tanzania and Rwanda, women still lag behind in terms of owning internet enabled mobile phones. Slightly more women continue to use the internet from an academic institution than their male counterparts.

Internet

Internet use in all countries in general and by gender increased between 2007/8 and 2011/12. However, there are still more men using the internet in all of the countries, except in Cameroon and Tanzania though the difference is minimal. Some women still claim that they are not aware of the internet and its benefits and others simply do not have the know-how or technical skills.

Computer

The study shows that computer use among individuals is still relatively low across African countries. Computer use is above 10% in only four of the countries surveyed and the gender gap still exists, with more men making use of computers in most of the countries, with the gap much wider in Kenya and South Africa.

Affordability and use

The gender gap is also wider in relation to the use of ICT devices. Some of the more advanced and sophisticated activities such as downloading applications, internet browsing, playing games, reading/writing emails are found to be more common

among men whilst the more basic mobile phone services are more used by women.

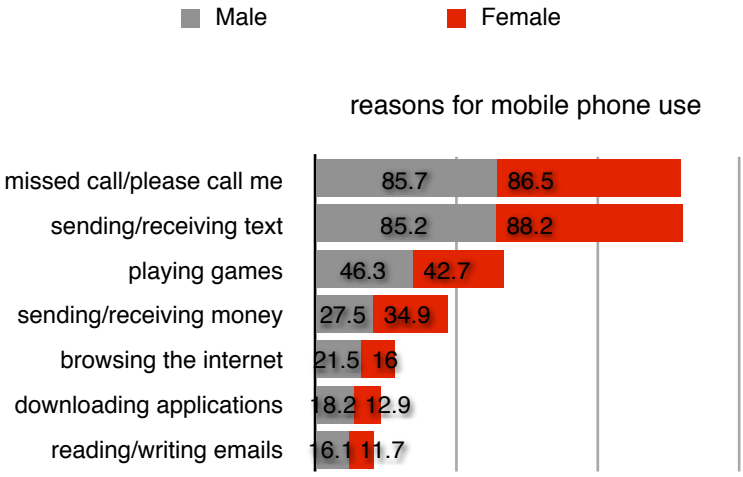

Figure 1: main reasons why individuals use mobile phones

Similar trends emerge in computer use with more men using this device to carry out word processing, work on spreadsheets, programming, remixing and playing games in comparison to women. The gender gap is even wider in more technical activities such as programming and remixing contents found online. This is indicative of the findings from previous RIA modelling on education and e-skills, that higher skills are a contributing factor to ICT use and that lack of e-skills can deter the extent to which ICTs can be used and the efficiency with which they can be used.

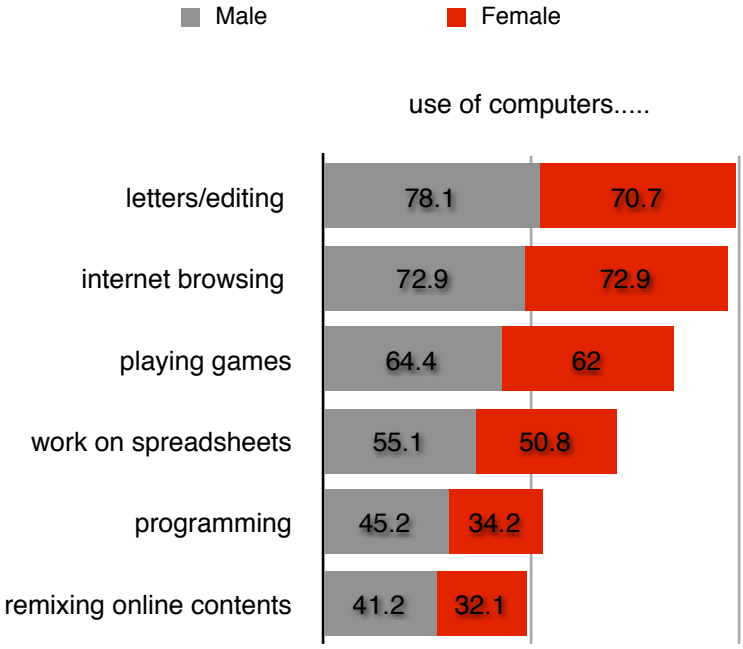

Figure 2: main reasons why individuals use computers

The use of social networks have been one of the contributing factors to the recent increase in internet use. More individuals are accessing social network sites from their mobile phones, with the share of women doing so (31.6%) slightly higher than men (27.2%). The results however show that there are still more males signed up for social network sites and having email addresses than females.

About 7.8% more women than men stated that they do not use the internet because they do not know what it is and about 4% more stated that they do not know how to use it. Slightly more women also mentioned that cost prevents them from using the internet.

Conclusions

The sex-disaggregated overview in this study indicates that women and men do not access and use ICTs equally but this is more so for internet than mobile. Women generally have less access to ICTs and use them sub-optimally and this increases as the technologies and services become more sophisticated and expensive. The findings reveal that there is a gender gap in income and education and confirms in the adoption models that these variables have a positive impact on ownership and use of ICTs.

Income is a key determinant if inclusion is to be achieved. The positive and causal relationship between education and income further points to the importance and need for ensuring equity in education.

Recommendations

The evidence in this study shows that to a large extent, gender inequities in access to and use of ICTs cannot be addressed through ICT policies per se. They require policy interventions in other areas that would allow women and girls to enjoy the benefits of ICTs equally. This would include policies and programmes that incentivise the education of girls, thereby addressing some of the issues relating to their relatively low levels of employment. This in turn will increase the income that women have to spend on ICT services allowing them to participate more effectively in society and the economy.

As a large number of women are among those most marginalised from ICTs they are likely to benefit from any more general sectoral interventions that extend services to lower income groups through low-cost business models or targeted universal service fund allocations or effective price regulation.

The points of policy intervention for great systemic social and economic inclusion of women through ICTs therefore needs to focus on far more fundamental intergenerational issues of education and income equity than dedicated access points, programmes and packages for women, while these may have ameliorative benefits for marginalised women already beyond the reach of the formal educational system.

For full paper by Mariama Deen-Swarray, Alison Gillwald and Ashleigh Morrell see:
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