ICT Access & Usage in South Africa

While the South African ICT sector continues to show significant expansion especially with the improved growth in the economy over the last few years, the findings of a household and individual user survey completed by Research ICT Africa! suggests that policy outcomes geared at the creation of an equitable information society may be sub-optimal.

South Africa Policy Brief No 1 **World Telecommunications Day** **17 May 2008**

SA lagging
Despite being a continental leader in ICT, many countries are catching up to SA and overtaking it on a number of key indicators.

Mobile prices inhibit optimal use
Despite the exponential growth of mobile, high prices inhibit optimal use of services.

Internet/broadband crisis
One of the major areas of concern is the low penetration rates for Internet.

Mobile not yet the total solution
With the high cost of mobile service and the fact that most mobile phones are not enabled for enhanced services, mobile does not provide short term solution to Internet expansion.

Public access phones still widely used
Even those with mobile phones continue to use public access phones to remain connected when airtime runs out or as part of cost effective usage strategies

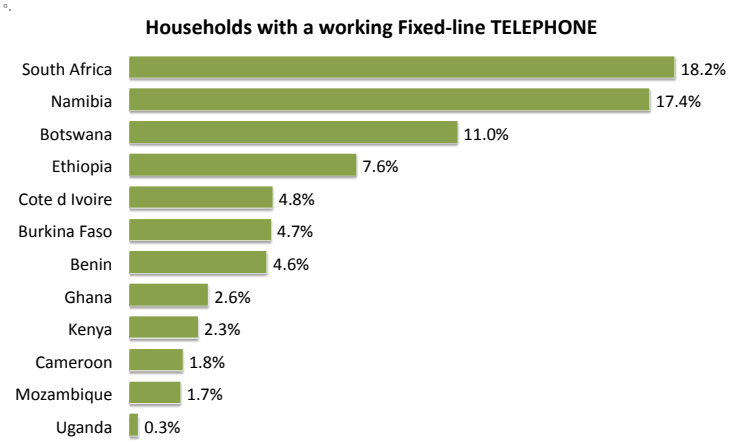
Demand for mobile at the bottom of the pyramid.
There is considerable demand for R25 a month services among low income users.

Introduction

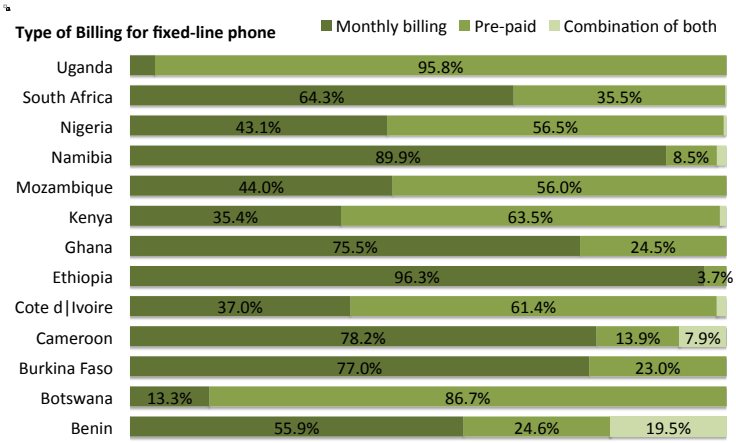
This policy brief is based on preliminary findings of a nationally representative household survey on e-Access & Usage conducted by Research ICT Africa across 17 African countries. The implications of this demand side survey suggest that policy objectives of affordable access for all to the range of services necessary for effective participation in a network economy are not being met.

Access & Usage

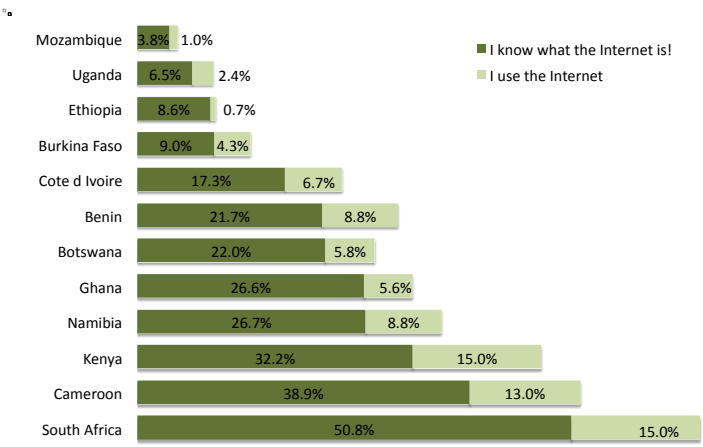
Like many countries that have privatised their fixed-line incumbents or introduced a single competitor, the focus of their expansion of voice and data services has been primarily on the corporate sector where returns on investment can be more rapidly realised. Like other countries fixed line growth is almost static in South Africa, with a decline in the ratio of residential to business lines. This is despite the introduction of pre-payment for fixed services. Only 18% of households indicated that they had a working fixed line telephone in their homes.



The reason for the introduction of pre-paid fixed services not having been as successful as mobile is the relatively high cost of line rentals which continues to be a barrier to the take up of services and which fails to offer the very low denomination charges for remaining on mobile networks, once the initial cost of the mobile receiving equipment has been outlaid.



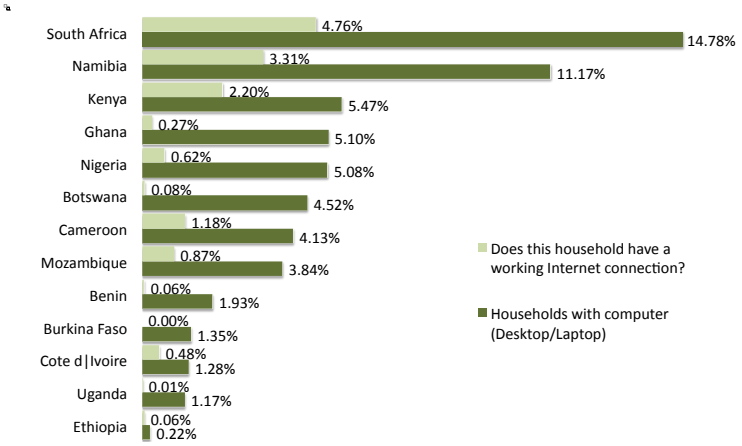
A major implication of this from a policy point of view is evident in the poor Internet usage figures for the country, which at only 15% of the population is only just among the highest of the sub-Saharan countries survey, but below other lower income countries such as Turkey, Poland and Argentina and also some Maghreb countries..



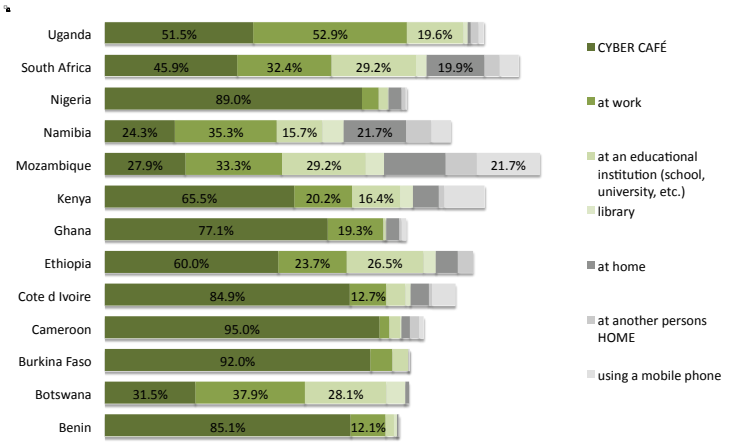
The high cost of Internet services has meant that few homes initially took up dial -up services. Of the small percentage that did, most high end-users have now switched to broadband. Despite the prices of ADSL having come down and the bandwidth caps on it having been

lifted prices remain high relative to other lower middle income countries and some of those in the Maghreb.

HSPDA services have leveraged the benefits of mobility and the initial high prices and caps on ADSL with large numbers of people using it as a substitute for fixed broadband, unlike many mature economies where it serves as a complementary service to fixed broadband services. Nevertheless these developments are all at the top end of the market, and a concerning number of South Africans remain disconnected from the enhanced services necessary to effective participation in the network economy and society.

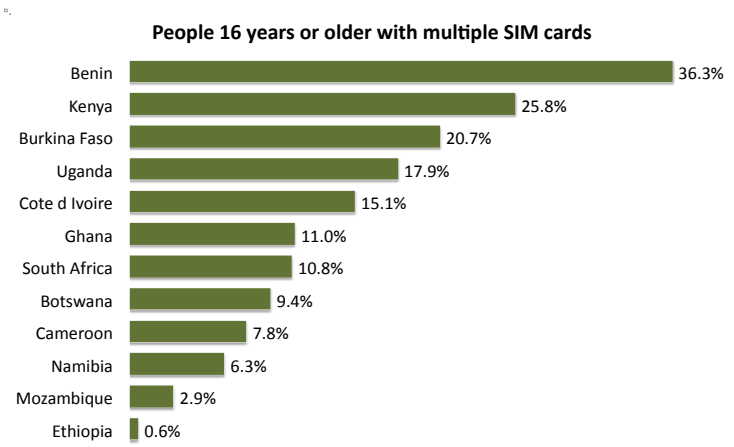


Ownership of personal computers and home connectivity to the Internet are very low across the continent, including South Africa. While in other countries those without home access use cybercafes to get online, in South Africa this is achieved primarily through work and school.



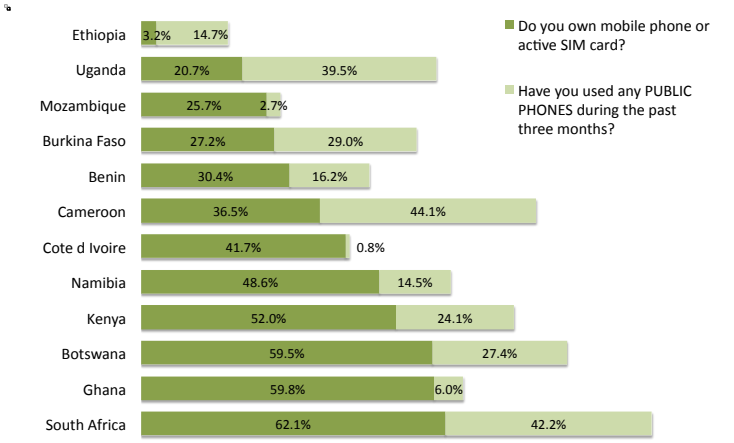
While mobile has been punted as the solution to this problem, the high cost of data services such as GPRS and 3G, capable of Internet functionality, dramatically constrains its use. Besides which, a vast portion of the mobile receivers are not enabled for enhanced services. Only in Mozambique and Kenya, where prices are lower than South Africa, is mobile used to any significant extent to access the web.

Despite the phenomenal success of mobile it is also evident from the number of multiple SIM cards being used, in order to benefit from on-net calls for instance, that the total number of subscribers in South Africa is likely to be considerably lower than indicated from the supply side data. From the percentage of individuals with multiple SIM cards, the over-count of those with access to communications by using the sum of mobile active SIM cards, could be as high as 4,85 million (10.8% of all SIM cards).

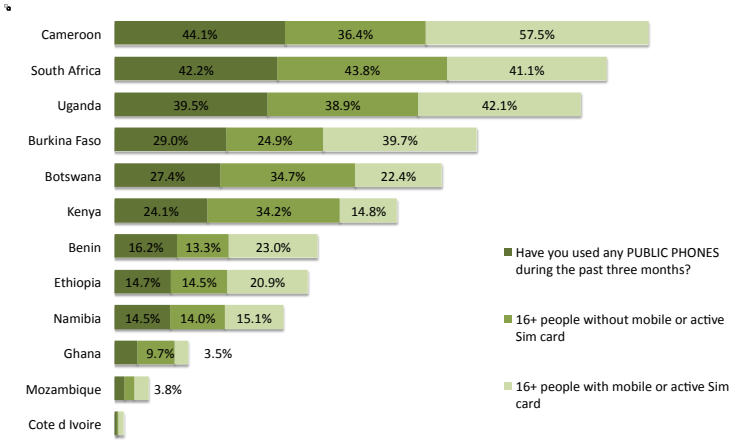


Expenditure

With one of the highest GDPs per capita on the continent, it is not surprising that South Africa has the highest average expenditure on fixed-line and mobile among the countries surveyed at US$31 and US$15 respectively a month. Averaging however, is boosted by the high end users, while obscuring the large numbers of mobile users whose use of mobile phones is severely constrained by price.

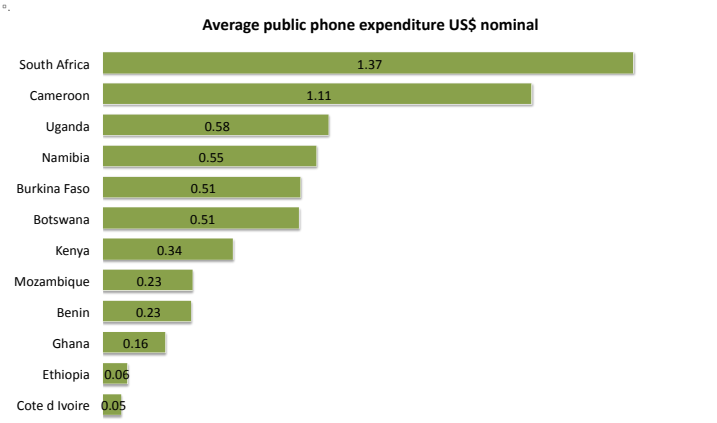


It is clear from the survey, and focus groups conducted, that while indisputably large numbers of people have acquired mobile phones, the relatively high cost of calls means they remain reliant on public access phones. These continue to be used by over 40% of those with mobile phones either due to their lower call charges or when ones' airtime runs out.

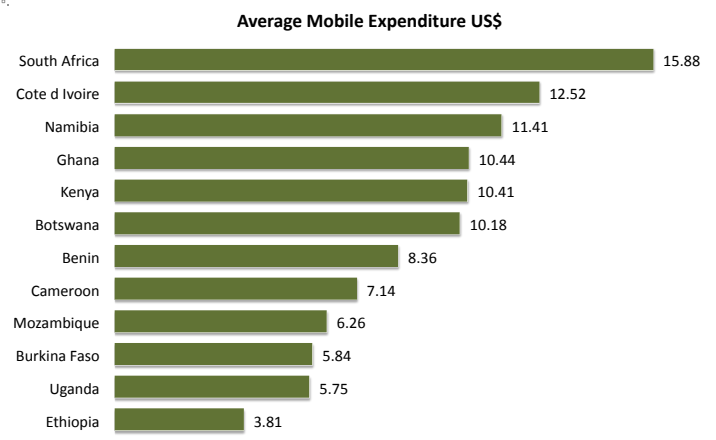


What this also shows is that where adequate public access points exist, public access by those without other means of access, either mobile or fixed remains significant. The use of these services by the most marginalised from communications services or as relief services by those with mobile phones but which may have expired is reflected in the extremely low level of expenditure on public access phones

relative to mobile and fixed line expenditure, as can be seen the tables below.

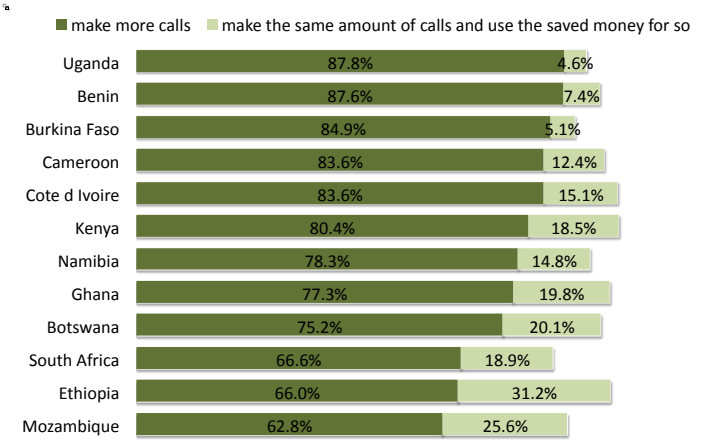


Interestingly, despite the much lower cost of fixed line calls, expenditure is almost double that of mobile at US$31 (R232) a month. With only 18% of households having a fixed line, this reflects the high fixed line monthly rental charge of R134 a month and the fact that those with fixed lines services are primarily in urban areas and are from higher income households.



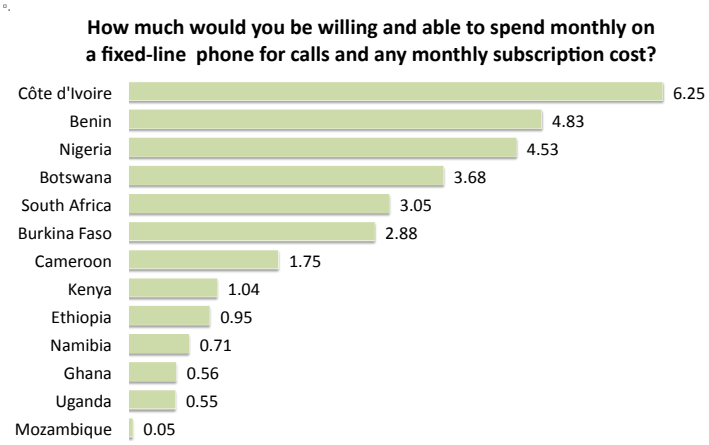
Price Elasticity

Like mobile users elsewhere across the continent, over 66% of those interviewed indicated that they would make more calls if prices came down. Suggesting that if operators reduced prices they would likely see more traffic.

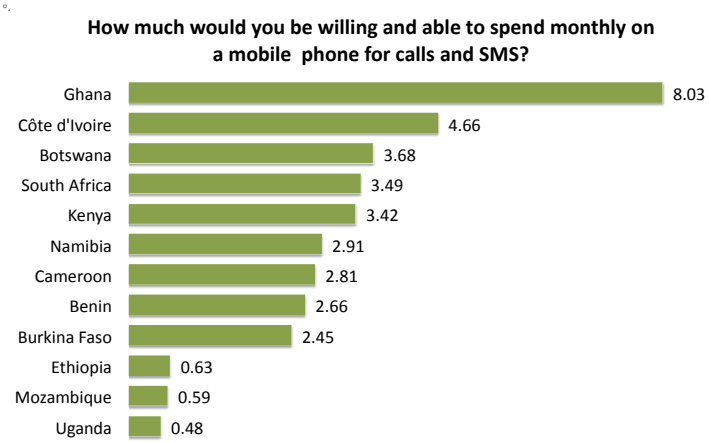


Untapped Market Potential

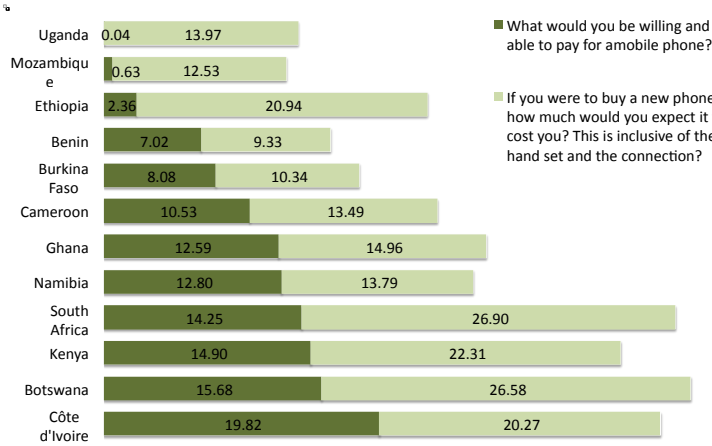
With the major constraint on access and usage being affordability, it would seem from the survey that even a moderate decrease in mobile prices of both handsets and call charges would enable the entry of thousands of additional users.



It is clear from the survey of non-users of mobile that the only way they will be brought into the market is through bottom of the pyramid business models. In South Africa US$3.50 (R26) a month is what those who currently do not have mobile phones would be willing and able to pay for service on average.

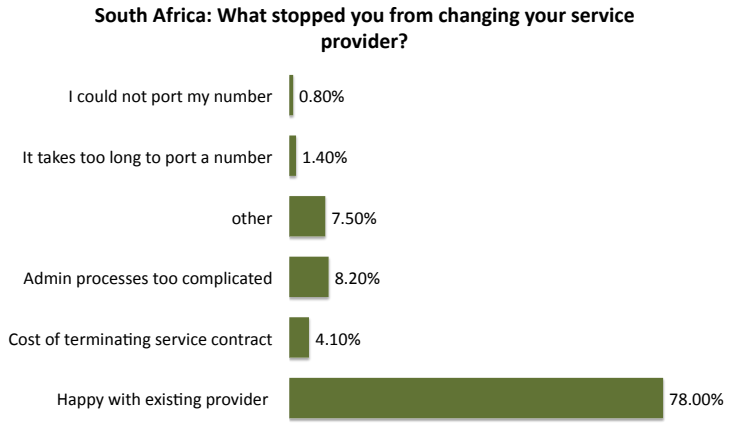


With $2 –a-day services being punted, there is still scope for large scale, low margin businesses. While the willingness to pay for a handset was nearly half the current cost of a new low cost receiver at around $14 (R105), with a big market in used phones in the country, this may not be as big a hurdle to new consumers of mobile services. On the other hand willingness to pay for fixed line services would not even cover the cost of lines rental at around $6 (R45) a month.



Number Portability

The dominant reason why South Africans have not switched providers is that they are happy with their current ones. Yet nearly 14% did not change their service provider due to the perceived complexity or cost disincentives associated with number portability.



Conclusions

The high price of communications in South Africa and their constraining effect on access and usage suggests that there is insufficient competition in the market in order to bring down prices. One can also conclude that regulation is not acting effectively as a proxy for competition. While mobile prices, did come down, as did ADSL prices, simply with the declared intention of the regulator to regulate prices, mobile services remain considerably higher than countries with similar geographic challenges, GDPs per capita and few economies of scale, such as Namibia and Botswana.

Prices for both fixed and mobile calls remain high and constrain the ownership and optimal usage of communication services. The effect of this constrained usage across the wider economy is that the opportunities associated with improved access are reduced and the gains sub-optimal. The innovations of low end users to acquire phones, to utilise multiple communication modes in more cost efficient ways are despite the communication markets they find themselves in, not because of them.

It is clear from the survey that even a modest reduction of mobile prices is likely to result in increased usage by consumers and the entry into the communications market by non-users. While high end users inflate ARPUs and average expenditure on communications measures, it is clear that for large numbers of people services are not affordable. That being said there appears to be some scope for bottom of the pyramid type service offerings with a demand for mobile phones by people willing to pay $3 a month for mobile services.

This does not appear to be the case with fixed lines service however, the high fixed costs of which appear to be a deterrent to the take up of these services. With the high cost of mobile data services and the fact that many phones are not Internet enhanced, the near static growth in fixed lines services together with the paucity of personal computers presents one of the major risks to the realisation of an information society in South Africa. While broadband services, fixed and mobile, have grown dramatically they continue to lag countries with considerably lower ADSL prices, in particular in North Africa.

Lower bandwidth prices being quoted as a result of competition in fixed services are a welcome outcome of the introduction of competition however, for some time to come these will be targeted at corporate users while the penetration of the residential market is expected to be very incremental. While state initiatives to address this problem through increased state owned infrastructure may address these problems in the longer term, more immediate regulatory interventions to ensure lower and more symmetrical interconnection charges between major operators, and fair access and facilities prices are needed.

Recommendations

Create conditions conducive to investment and development of the sector by:

- creating a certain and competent policy and regulatory environment
- remove legal barriers to entry into the market and introduce service neutral licences
- reduce interconnection charges and introduce symmetry among dominant operators
- provide for fair access to cost-based facilities
- enable open access to encourage the seamless and cost-based access of networks to networks, services to networks, local networks to backbones, backbones to undersea cables.
- remove ownership restrictions that constrain competitive entry into the market and place a premium on the cost of services.
- explore more effective use of universal services funds.

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