

Mobile Communications in Zambia

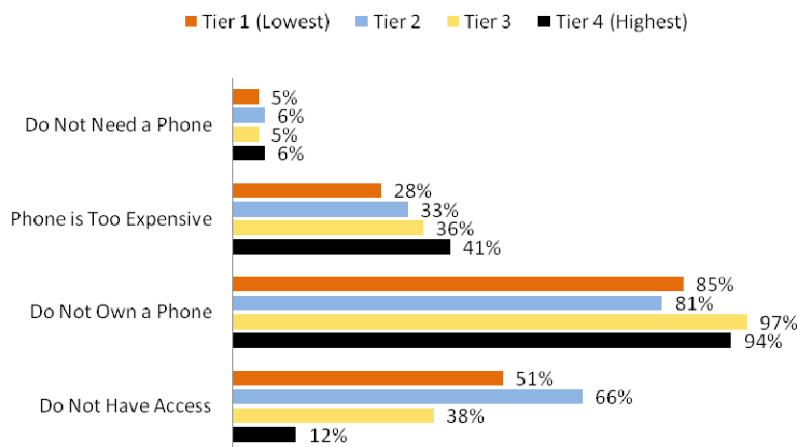
A demand-side analysis based on the AudienceScapes Survey

Chapter 5: Barriers to Phone Ownership and the Dynamics of Phone Sharing

Researchers have identified a number of potential barriers to mobile phone ownership or use, the most obvious of which are lack of disposable income or access to mobile phone coverage. **Although the AudienceScapes survey data reveal an income divide in the Zambian mobile market, they also indicate that the divide is narrowing.** This point is supported by respondents' statements about why they do not use a phone. Of low-income respondents who have never used a phone, only 28 percent cited expense as the reason.

Figure 5.1

Zambia: Why Some Zambians Do Not Use a Mobile Phone
Percent of respondents who have not used a phone



AudienceScapes National Survey of Adults (15+) who have not used a mobile phone n=472

Most non-users appear to associate lack of use with lack of ownership (Figure 5.1), even though many non-owners are in fact able to use other people's phones. In many societies, ownership of a mobile phone not only grants an individual unfettered access to communication but also carries with it social status and, for some, empowerment. This may help to explain why non-users have placed greater worth on personal ownership.ⁱ

This greater emphasis on phone ownership versus access - topping even cost as an inhibiting factor - is not surprising when taking into account the substantial differences in the range of phone activities available to an individual who owns a phone versus someone who must borrow a phone. **If an individual is a mobile phone borrower instead of an owner, they are often limited to simply sending or receiving SMS messages and voice services. In addition, phone borrowers often lack the option of private communication.**

Figure 5.2

| Zambia : Reasons for Not Having Used a Mobile Phone by Province | | | | | |
|--|--------------------------------------|-------------------------------|--|---|---|
| Percent of respondents who have never used a mobile phone in that province | | | | | |
| Province | Human Development Index Score (2004) | Mobile Phone is Too Expensive | There is no mobile phone signal where I live | I have nowhere to charge a mobile phone battery | Total percentage of province without home electricity |
| National Level | 0.462 | 32% | 15% | 16% | 61% |
| Northern | 0.384 | 33% | 16% | 28% | 70% |
| Luapula | 0.385 | 56% | 34% | 34% | 86% |
| Northwestern | 0.453 | 16% | 22% | 10% | 81% |
| Southern | 0.469 | 37% | 17% | 18% | 58% |
| Copper Belt | 0.552 | 23% | 8% | 12% | 33% |

AudienceScapes Zambia April 2010: national survey of adults (15+) n=2000; who have never used a mobile phone Luapula N=88; Northern N=60 Northwestern N= 49; Southern N=90 Copper Belt N= 60.

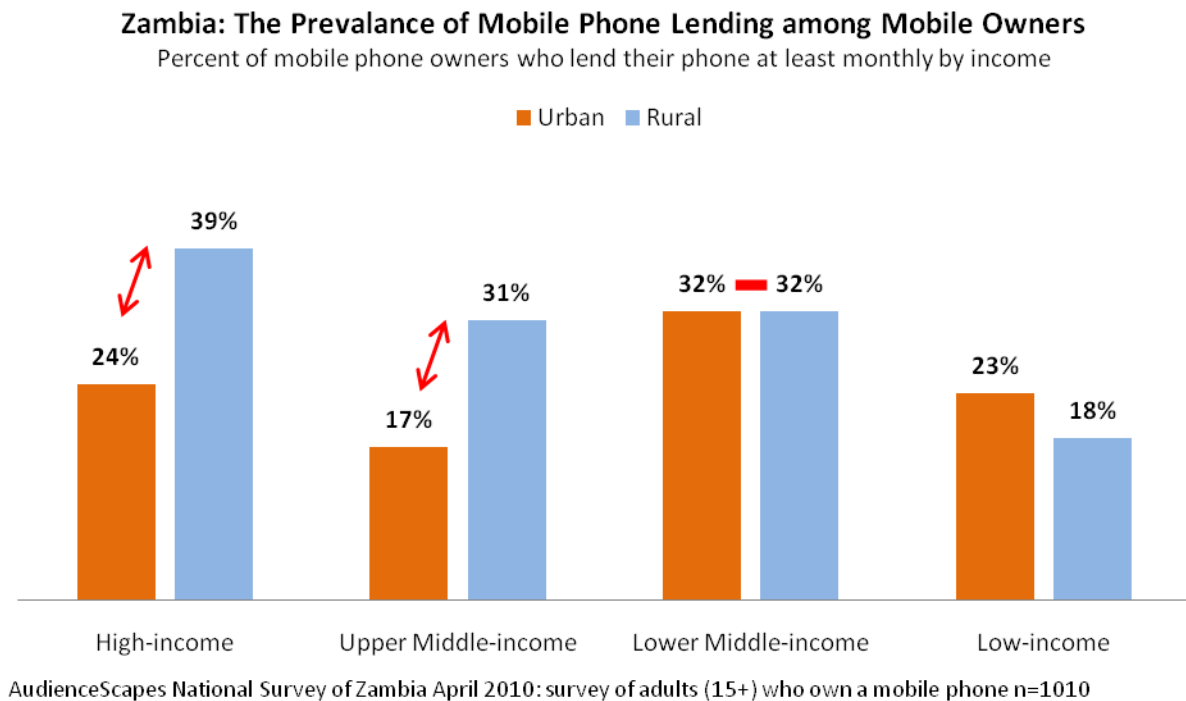
Figure 5.2 breaks down some of the reasons for mobile phone non-use by province, revealing that the significance of various barriers varies substantially. Barriers linked to infrastructure gaps appear to disproportionately affect less-developed provinces such as the Northern, Western and Luapula. The latter's lack of economic development and infrastructure make it no surprise that Luapala posts the highest percentages of non-users to list the expense of a handset (56 percent), a lack of mobile signal (34 percent) and a lack of an ability to charge a phone (34 percent) as deterrents to mobile phone use.ⁱⁱ

Va. Phone Sharing Dynamics

Knowledge of the frequency with which Zambians share their phones, and with whom people choose to share, helps development practitioners better understand the impact of mobile phones, how Zambians use them and how phones may be used to their benefit. A number of studies have addressed the importance of mobile phone sharing, not just in expanding the medium's use but also in the maintenance and creation of social capital - the bridges and connections within and between social networks.ⁱⁱⁱ Qualitative research conducted in Africa has also observed that there are often varying motivations for mobile phone sharing and borrowing.^{iv}

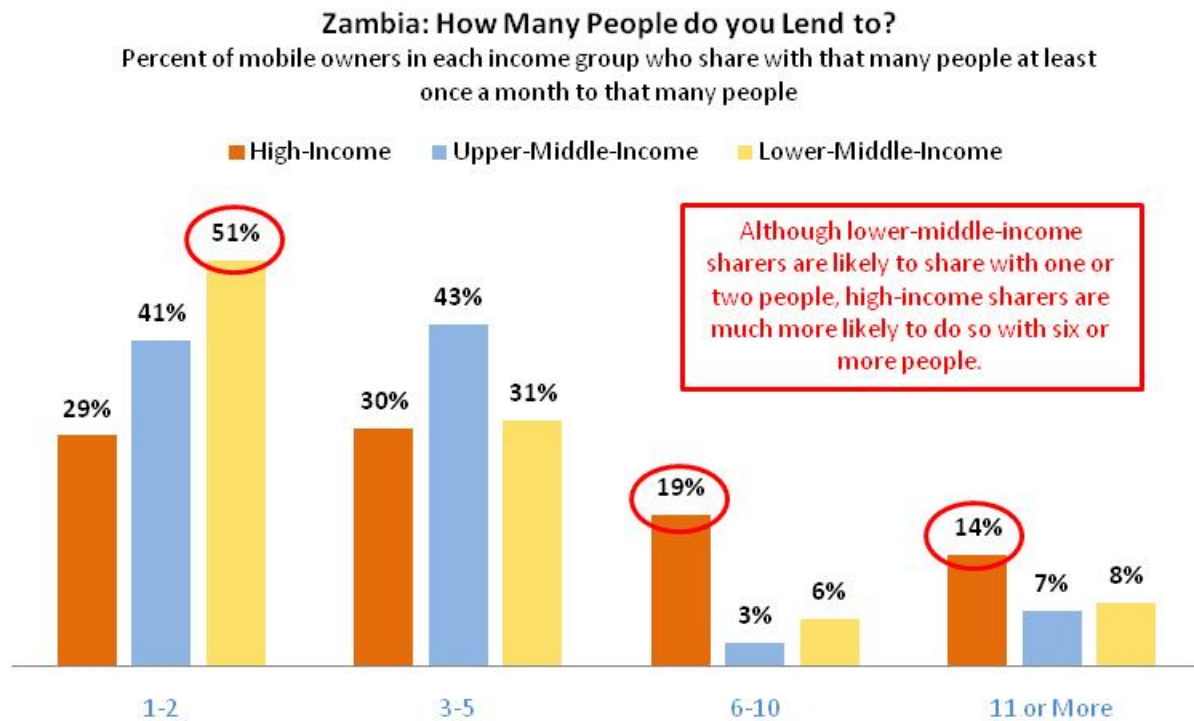
For borrowers, it appears that their central motivation is to find a cost-effective means of communication. If an individual cannot afford a handset, they may choose to arrange with family, friends or others in their community to use someone else's phone on an ad hoc or regular basis. Many mobile phone borrowers buy a SIM card which they can use in other people's phones.

Figure 5.3



Mobile phone lenders often respond to social pressure to make their phones available to others. However, as the AudienceScapes research suggests, **the practice of mobile phone lending is not always purely altruistic – some lenders said they sometimes require borrowers to pay for the service.**

Figure 5.4



AudienceScapes National Survey of Zambia April 2010: survey of adults (15+) mobile phone owners n=952; share phone at least monthly n=151

Some 26 percent of mobile phone owners surveyed (or 12.5 percent of all respondents) said they lend out their phone at least once a month. Mobile lending has become common practice among lower-income mobile phone users, especially those in rural areas.

Figure 5.3 shows that mobile phone lending is not only practiced by more-affluent Zambians. The survey data also indicate that, as Zambia’s mobile phone market has progressively extended to lower-income households, there has been a parallel trend of increased mobile lending. Going forward, as the mobile market expands further down the income pyramid, most likely, phone lending is going to grow at a faster pace. Phone sharing may be the result of familial networks sharing the cost of owning and using a phone, whereas for individuals, that would not have been possible.

Figure 5.5

| Zambia: The Importance of Mobile Phone Lending Percentage Point Differences in Mobile Phone Use Among Provinces Percent of respondents in that province who have access, ownership or use a phone of that frequency | | | |
|---|--------------------|----------------------|--------------------------------------|
| Province | Personal Ownership | At least Monthly Use | Difference between Ownership and Use |
| Lusaka | 78% | 86% | 8% |
| Copper Belt | 63% | 71% | 9% |
| Central | 43% | 62% | 9% |
| Eastern | 47% | 65% | 18% |
| Northern | 46% | 61% | 15% |
| Northwestern | 47% | 52% | 5% |
| Southern | 42% | 53% | 11% |
| Luapula | 27% | 34% | 7% |
| Western | 16% | 44% | 28% |

AudienceScapes Zambia April 2010: national survey of adults (15+) n=2000; Central n=191; Copper Belt n=334; Eastern n=264; Luapula n=157; Lusaka n=293; Northern n=243; Northwestern n=118; Southern n=245; Western n=155.

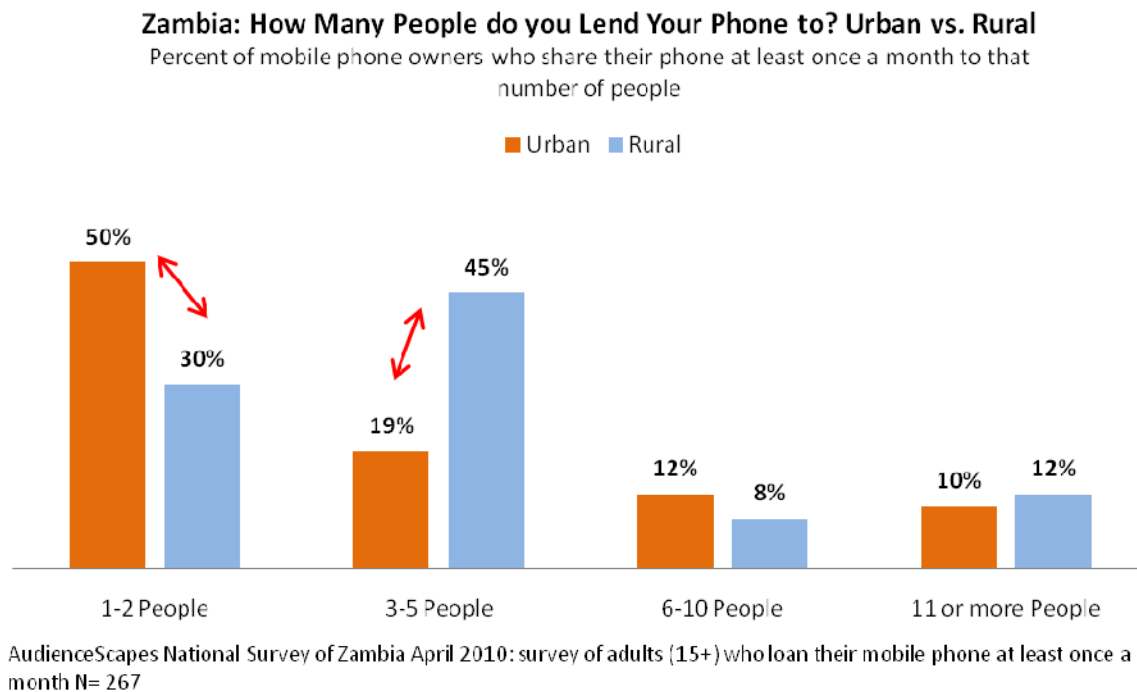
As with many other aspects of mobile phone access and use, education levels play a part in phone sharing patterns. Mobile phone owners with either a secondary or post-secondary education are the most likely to say they lend their phones to others. The frequency drops considerably among those with only a primary education.

Looking at the extent of mobile sharing from a geographic perspective, Figure 5.5 shows that the percentage of monthly mobile phone users in each province surpasses the percentage who own a mobile phone by wide margins. Thus, a considerable percentage of mobile phone owners are consistently sharing their phone with people outside their family.

Vb. Rural Sharing

Lenders charging borrowers for the privilege of using a phone is a source of supplementary income across much of the developing world.^v The AudienceScapes survey indicates that in Zambia, phones are usually loaned for free. About 20 percent of mobile phone lenders (5 percent of all mobile phone owners) said they sometimes loan for free and sometimes require the borrower to pay a fee. Only a few respondents said they exclusively demand a fee.

Figure 5.6



Rural phone lenders are much more likely than urban lenders to say they sometimes demand a fee from borrowers. The likelihood that a mobile phone owner charges for loaning his or her phone was generally steady across income groups.

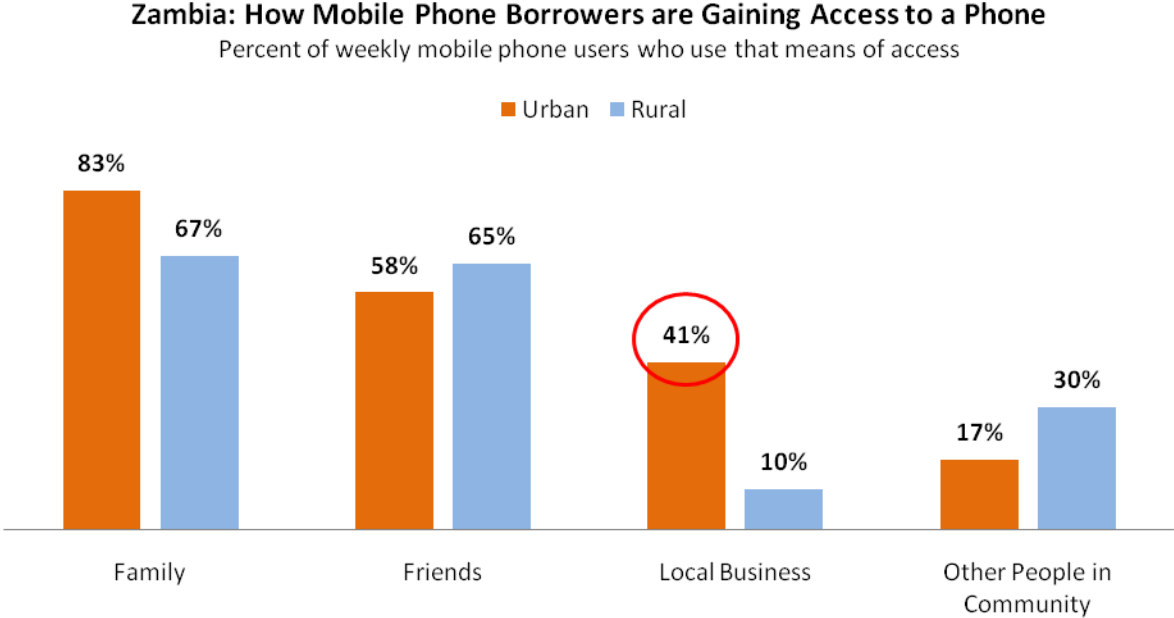
Vc. The View from the Borrowers' Side

Sixteen percent of regular mobile users described themselves as borrowers. Analyzing this segment of the mobile phone market is crucial to understanding the role of mobile phones in spreading development information, and in how lower income individuals gain access to this increasingly important communication medium.

Among regular (weekly) mobile phone users who do not own a phone, family and friends are the most-often cited source for borrowing a mobile phone. Location plays a critical role in how a borrower gains access to and uses a phone, with more urbanites having the option of borrowing at a commercial establishment or vendor - most likely for a fee. This is to be expected, as rural mobile users are in more remote locations with less commercial development nearby (Figure 5.6).

Rural mobile phone borrowers appear to compensate for the lack of access options by turning to other people in their communities. This supports the finding, mentioned previously above, that a higher percentage of mobile phone owners in rural areas charge a fee for the use of their phone. It also hints that rural mobile phone borrowers are filling this gap in access through the informal commercial sector. This is a significant trend - nearly a third of regular mobile phone borrowers report being able to gain access through others in their community, which may be for free or at a fee.

Figure 5.7



AudienceScapes National Survey of Zambia April 2010: survey of adults (15+) who use a mobile at least weekly but do not own a mobile phone N = 179

Vd. Mobile Phone Borrowers and SIM Card Use

Some mobile phone borrowers purchase SIM cards for use in other people's phones. A SIM card allows the borrower to maintain a personal phone number and SMS message history, but the owner is still limited in how they can use a phone by not having ready personal access to a handset.

About 31 percent of all regular mobile borrowers said they use SIM cards in other people's phones. The advantages that mobile phone owners enjoy seem to substantiate previous research in Tanzania and South Africa positing that the potential for the mobile phone to be an important tool for social capital development and the maintenance of social networks is dependent on the level of phone ownership.^{vi}

Figure 5.8

| Zambia: Weekly Activities According to Means of Mobile Phone Access | | | |
|---|--------------------|--|---------------------------|
| Percent of respondents with that means of access and conducts that activity at least weekly | | | |
| | Personal Ownership | Owns SIM Card Borrower without SIM Card | Borrower without SIM Card |
| SMS-Text Messaging | 81% | 52% | 23% |
| Listen to Radio | 36% | 10% | 5% |
| Receive Information via Formal SMS Service | 16% | 12% | 2% |
| Take or Send Photo | 13% | 4% | 0% |
| Access Websites | 11% | 3% | 0% |
| Conduct Financial Transactions (At Least Monthly) | 9% | 1% | 1% |
| AudienceScapes Zambia April 2010: national survey of adults (15+) N=1010 who own a mobile phone; Owns SIM Card N=110; Borrower without SIM card N=398 | | | |

Phone borrowers with SIM cards were much more likely than those without SIM cards to say they borrowed phones from family members (74 percent versus 54 percent), implying that those without SIM cards must make a more concerted effort to find access beyond their family units.

In an indication that Zambia's mobile phone market still has considerable room to grow, most mobile phone borrowers said that they have the intention of purchasing a mobile phone in the near future. Eighty-nine percent of borrowers either agreed or strongly agreed with the statement, "I intend to buy a mobile phone in the near future." Adding to that the high percentage of mobile phone non-users who said that they have an intention of using a phone in the future, continued growth in the sector can be expected.

ⁱ Portus, Lourdes M. (2008) "How the Urban Poor Acquire and Give Meaning to the Mobile Phone". Handbook of Mobile Communication Studies. Edited by James E. Katz. The MIT Press: Cambridge, MA. 105-118. And Rheingold, Howard. (2008) "Mobile Media and Political Collective Action". Handbook of Mobile Communication Studies. Edited by James E. Katz. The MIT Press: Cambridge, MA. 225-239.

ⁱⁱ The number of respondents who were non-mobile phone users in the Western province did not reach the statistical threshold for analysis.

ⁱⁱⁱ Vodafone. 2005. "Africa: The Economic Impact of Mobile Phones." Vodafone Policy Paper Series, Number 3, Accessed September 2010.

http://www.vodafone.com/etc/medialib/attachments/cr_downloads.Par.78351.File.tmp/GPP_SIM_paper_3.pdf

^{iv} Chipchase, Jan. and Indri Tulusan. (2007) "Shared Phone Practices: Exploratory Field Research from Uganda and Beyond". Nokia. http://research.nokia.com/files/JanChipchase_SharedPhoneUse_vFinal_External.pdf.

^v Ibid. and James, Jeffrey James and Versteeg, Mila. "Mobile phones in Africa: how much do we really know?". Social Indicators Research. (2007) 84:117–126

^{vi} Goodman, James. 2005. "Linking mobile phone ownership and use to social capital in rural South Africa and Tanzania". In Africa: The Economic Impact of Mobile Phones. *Vodafone Policy Paper Series*, Number 3, Accessed September 2010.