

## ***Mobile Communications in Zambia***

A demand-side analysis based on the AudienceScapes Survey

### ***Chapter 4: Early Adopters vs. Recent Adopters: Determinants of Mobile Use Patterns***

When analyzing trends in technology use, researchers often try to identify "early adopters" who were first to begin using or owning a particular technology—and those who adopted it later on. In some cases, the use patterns of early adopters can provide clues as to how more general patterns use will evolve.

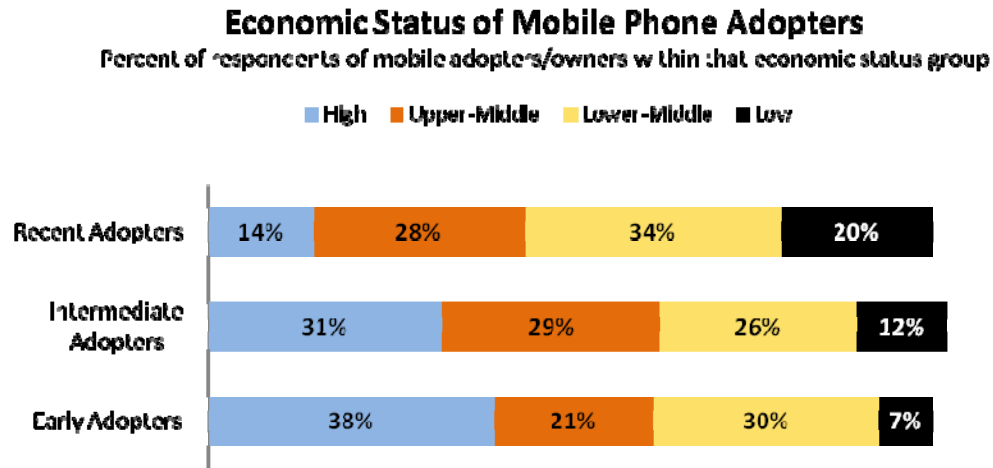
<b>Mobile Phone Adoption Categorizations</b>
<b>Early Adopters</b> are those respondents who began owning a mobile phone more than five years ago, n=195
<b>Intermediate Adopters</b> are those respondents who have owned a mobile phone between one and four years, n=565
<b>Recent Adopters</b> are those respondents who have only started owning a mobile phone in the past year n=237

The AudienceScapes analysis team divided mobile phone owners into three categories: early, intermediate and recent adopters. **One might assume that those who purchased their phones relatively early would also be among the more affluent members of society. This is also reflected in the AudienceScapes**

**data, though some 30 percent of early adopters are in the lower-middle income tier.** This is just behind the high-income tier, which includes 38 percent of early adopters.

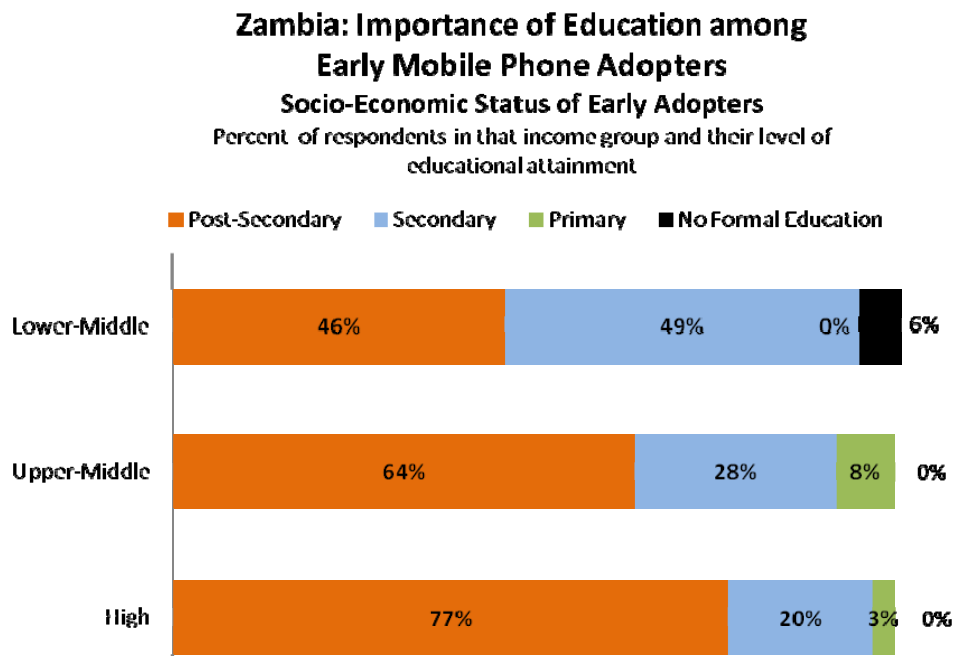
**The data also indicate that, over time, mobile adoption has rapidly expanded to the lower-income tiers.** Prepaid calling products and "calling party pays" billing, where the caller is charged and not the recipient, likely have helped propel this move down the income chain, as mobile phone owners are better able to manage how much money they spend on phone use.<sup>1</sup>

Figure 4.1



AudienceScapes Zambia April 2010: national survey of adults (15+) who own a mobile phone; Early Adopters who have owned a phone for at least five years n=195; Recent Adopters have owned a phone for a year or less n=237; Intermediate n=565

Figure 4.2

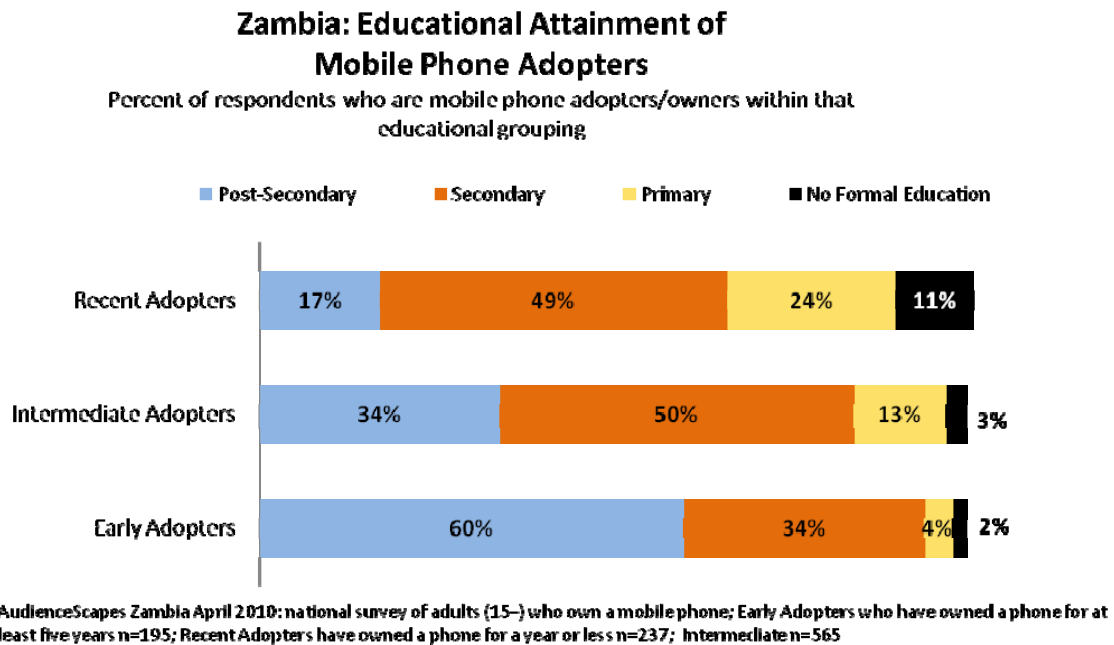


AudienceScapes National Survey of Zambia April 2010: survey of adults (15+) who own a mobile phone; Early Adopters who have owned a phone for at least five years n=195.

Education level also emerges as a key factor in early cell phone adoption; those respondents having achieved a post-secondary education dominate the category (Figure 4.2), regardless of

income level. Among early adopters it seems that education may have been a more significant factor than even income. That said, education appears to be less of a factor in adoption than it used to be: only 66 percent of recent adopters said they have at least some secondary education, compared to 94 percent for early adopters and 84 percent of intermediate adopters.

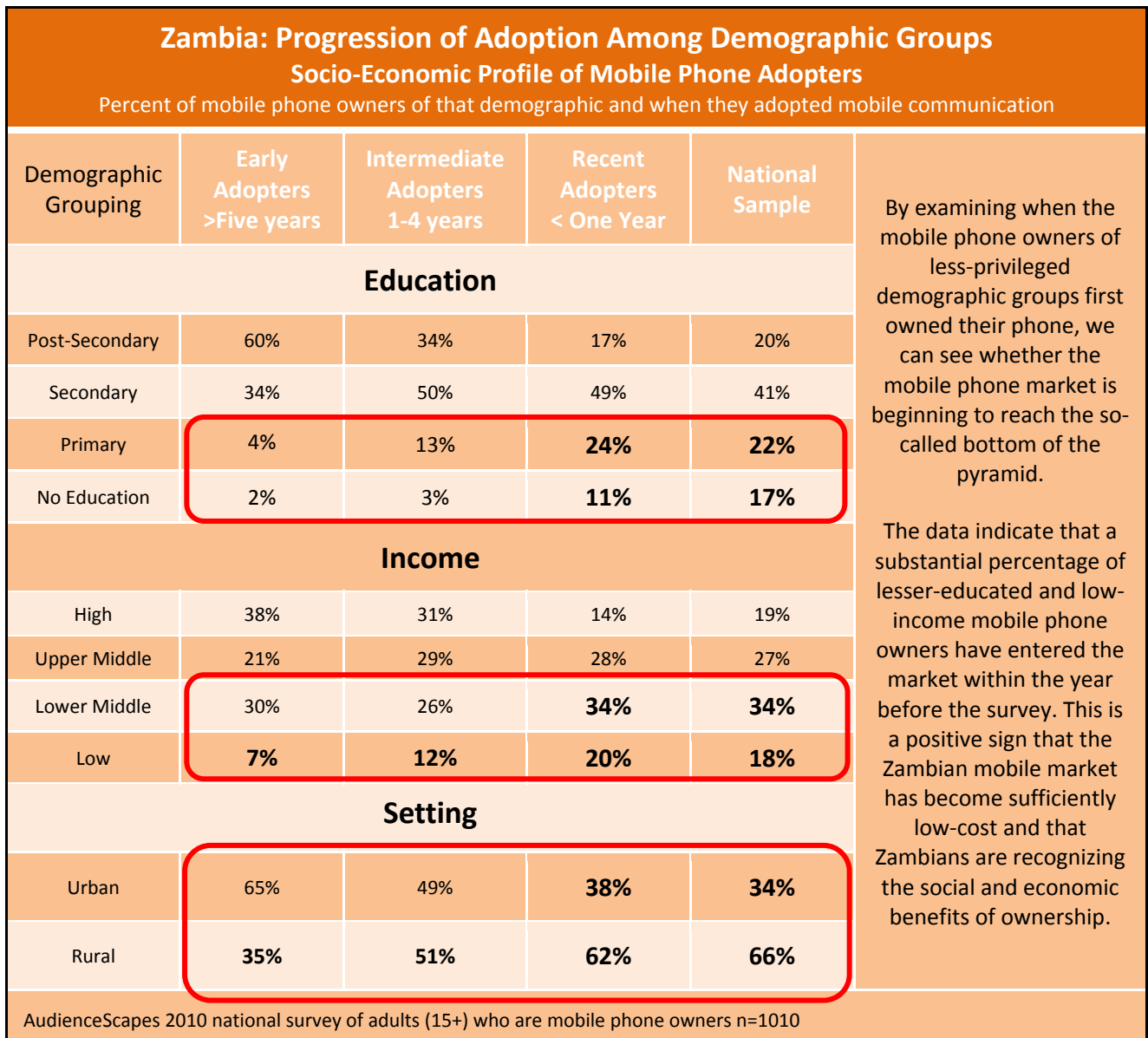
Figure 4.3



There is a wide gender divide among early adopters in favor of men, both in number and in likelihood of adoption, even among those of higher socio-economic status. However, among the more affluent *recent adopters* (those in the high or upper middle-income tiers), the **gender divide actually inverts**, with women more likely to be recent adopters. But the pro-male bias remains among lower-income Zambians.

A majority of early adopters (65 percent) are urbanites; rural residents are 62 percent of recent adopters. Reflecting this, **early adopters were much more likely to say they have access to electricity from the main grid; more than half of recent adopters have no access to electricity within their household.** In addition to showing how mobile phone adoption is now spreading to rural areas, it also indicates how not having a committed source of electricity in the home is not a hindrance to adoption.

Figure 4.4



By examining when the mobile phone owners of less-privileged demographic groups first owned their phone, we can see whether the mobile phone market is beginning to reach the so-called bottom of the pyramid.

The data indicate that a substantial percentage of lesser-educated and low-income mobile phone owners have entered the market within the year before the survey. This is a positive sign that the Zambian mobile market has become sufficiently low-cost and that Zambians are recognizing the social and economic benefits of ownership.

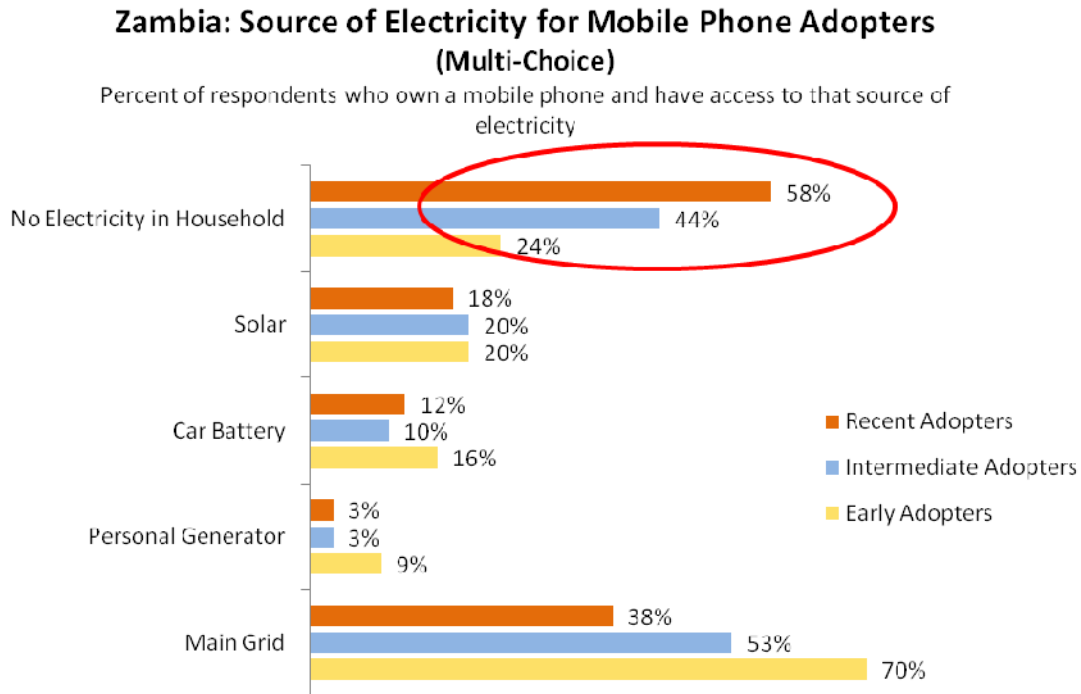
Interestingly, survey data reveal there has not been a substantial shift in the age mix among mobile phone adopters over time. Thirty-six percent of early adopters were between 20 and 29 when they first acquired their phones. Similarly, 38 percent of recent adopters are between 20 and 29. Mirroring this lack of change, 24 percent of early adopters were 30 to 39 and 21 percent of recent adopters are 30-39. According to the Population Reference Bureau, life expectancy in Zambia has only reached 38 years.<sup>ii</sup>

From a different statistical angle, **the data show further evidence that Zambia's mobile market has made considerable progress over the past year in reaching the less privileged.** Figure 4.4 shows how a substantial percentage of mobile phone owners of less privileged backgrounds have only recently acquired a mobile phone. In fact, the demographic makeup of recent mobile phone adopters strongly mirrors that of the survey's national sample. The recent drop in the estimated monthly cost of using a mobile phone was likely a major contributor to the rise in mobile ownership among low-income households. Between 2008 and 2009, as mentioned above, the estimated monthly cost of using a mobile phone dropped from 18.50 percent of monthly gross national income per capita to 16.07 percent.

Mobile ownership has likely also increased due to the influx of low-cost phones in recent years. In 2009, Zambia became one of only two countries in Africa to be home to a mobile phone manufacturing plant, located in Lusaka. It reportedly manufactures models ranging from ultra low-cost to state-of-the-art wifi connected phones.<sup>iii</sup> In addition, the mobile service provider Zain was offering mobile phones at a subsidized price of \$10, a lower cost than the typical imported mobile phone.<sup>iv</sup>

Another indication that mobile phone ownership is beginning to reach those less privileged is the realization that a majority of recent adopters do not have access to electricity in their home. In fact, the percentage of phone owners with access to the main grid progressively declines along the adoption timeline and conversely those without any home access to electricity increases. What the above information tells us is that the traditional barriers to mobile ownership, such as lack of disposable income or access to household electricity, may remain hurdles for many Zambians (Chapter 5) but they are not insurmountable.

Figure 4.5

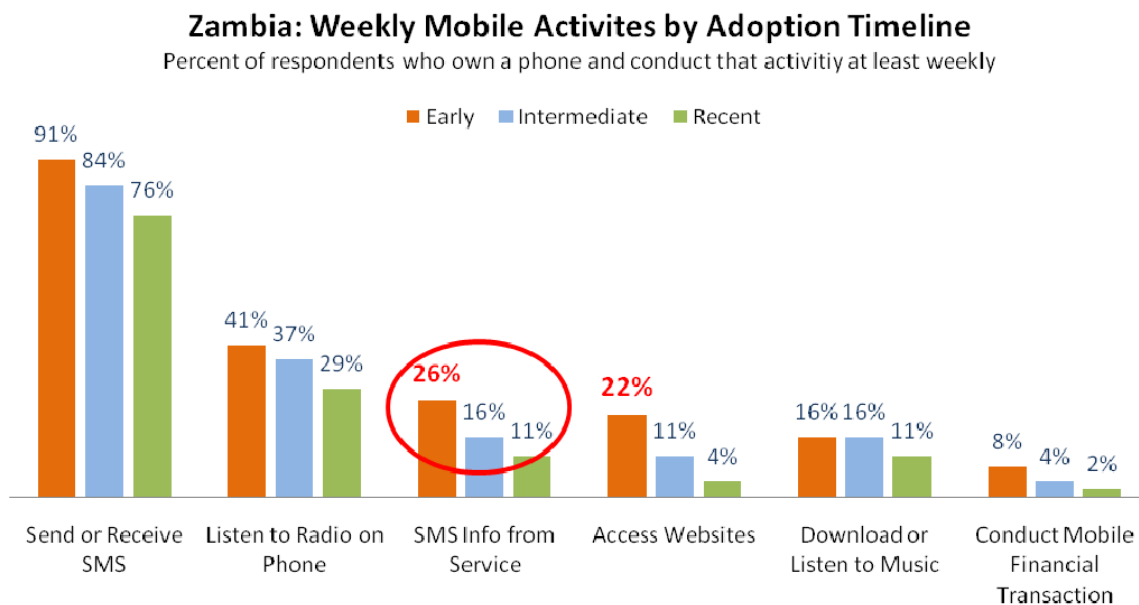


AudienceScapes National Survey of Zambia April 2010: survey of adults (15+) who own a mobile phone: Early Adopters who have owned a phone for at least five years n=195; Recent Adopters have owned a phone for a year or less n=237; Intermediate n=565

### *Early Adopter Activity Patterns - The Shape of Things to Come*

The early adopters in the Zambia AudienceScapes survey are much more likely than more-recent adopters to conduct a wider variety of phone functions (Figure 4.6). It is logical that early adopters would access websites or conduct other activities that require data services, as they tend to have higher household incomes and reside in urban areas where mobile coverage supporting data services is located.

Figure 4.6



AudienceScapes National Survey of Zambia April 2010: survey of adults (15+) who own a mobile phone n=1011

**The adoption gap shows up in the number of phone owners who receive news and information via SMS services.** In the development community, it is increasingly popular to provide educational or other supportive information to target groups via text message. The AudienceScapes mobile phone adoption data suggest that lack of use of such information services may be the result of a lack of knowledge about such services rather than a socio-economic barrier, given that many of these types of services are provided free of charge. (*The use of SMS messages for development purposes is discussed further above*).

<sup>i</sup> Kalba, Kas. 2008. "The Adoption of Mobile Phones in Emerging Markets: Global Diffusion and the Rural Challenge". *International Journal of Communication*, 2, 631-661.

<sup>ii</sup> "Zambia: Statistics". Population Reference Bureau. Washington, DC. Accessed September 2010. <http://www.prb.org/Countries/zambia.aspx>.

<sup>iii</sup> "Zambia's M.Mobile to export its handsets to other African countries: 10,000 to go to Zimbabwe". Balancing Act. Issue 453, 8 May 2009. Sourced from ComputerWorld. Accessed November 2010. <http://www.balancingact->

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[africa.com/news/en/issue-no-453/telecoms/zambias-mmobile-to-export-its-handsets-to-other-african-countries-1000](http://africa.com/news/en/issue-no-453/telecoms/zambias-mmobile-to-export-its-handsets-to-other-african-countries-1000).

<sup>iv</sup> Miyanza, Owen. "M-Tech, first mobile phone plant in Africa". Africa News. 6 July 2009. Lusaka, Zambia. Accessed November 2010. [http://www.africanews.com/site/list\\_message/21151?data%5Bsource%5D=rss](http://www.africanews.com/site/list_message/21151?data%5Bsource%5D=rss).