

Mobile Communications in Zambia

A demand-side analysis based on the AudienceScapes Survey

Chapter 2: SMS Use and Its Role as an Information Exchange Tool

As noted at the beginning of this report, mobile- and SMS-driven applications have become very popular tools for development implementers who want to deliver and share critical information to educate or empower local citizens. As such, it is helpful from a strategic point of view to know the frequency with which people use SMS to access news and information, whether or not key target groups are doing so on a regular basis, and if they are passing along this information to others.

Only about 16 percent of regular (weekly) mobile phone users said they access news and information via SMS at least weekly (Figure 2.1), with the percentage rising to 22 percent for urban users only, and falling to 9 percent for rural users only. Figure 2.1 and 2.2 highlights the gap in SMS news between both mobile phone owners and borrowers.

Figure 2.1

Zambia: Weekly Activities According To Means Of Mobile Phone Access Percent of respondents who conduct that activity at least weekly; by means of access			
	Personal Ownership	Owns SIM Card Borrows Phone	Borrower without SIM Card
SMS-Text Messaging	81%	52%	23%
Listen to Radio	36%	10%	5%
Receive Formal Information Services via SMS	16%	12%	2%
Take or Send Photo	13%	4%	0%
Access Websites	11%	3%	0%
Conduct Financial Transactions (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.

Our analysis reveals three main factors determining the use of SMS as a news and information source: location (urban vs. rural), level of education, and ownership of a phone or SIM card. Education is a key factor - a minimum level of functional literacy is needed for a mobile consumer to sign up for or access SMS information services.

Twenty-nine percent of regular mobile users with a secondary education said they receive SMS news at least monthly, versus only 16 percent of regular users with a primary education or less. Formal information services received via SMS can range from news updates provided by mobile service providers to business-related services, such as crop price updates from the Zambia Farmers Union (funded by the UN's International Fund for Agricultural Development).

Indeed, some 9 percent of farmers and agricultural workers in the Zambia survey said they receive SMS news and information at least weekly, versus 17 percent at least monthly.

Finally, regular users who are a phone owner or possess a SIM card are well over twice as likely as mobile borrowers without a SIM card to access SMS news at least weekly (Figure 2.1). Zambians who own a mobile phone or a SIM card have the advantage of possessing a personal phone number, allowing them to join SMS listservs; of course, mobile phone owners have the freedom to access their phone whenever needed.

Knowledge may also play a role in the urban/rural SMS news and information divide. Urban mobile phone borrowers are equally as likely to access information via SMS as those in rural areas who own a mobile phone. This indicates either a large gap in service or a lack of effort to sensitize mobile phone users in rural areas to information services. Understandably, rural residents in our survey are in general less likely to be high-intensity media consumers compared to urban dwellers, making them less exposed to information campaigns promoting SMS services.

To inform mobile phone users about SMS-based information services, it is crucial that development organizations also publicize via mass media outlets to make their target audiences aware of the services. With the growing prevalence of scams perpetuated via SMS, lower income Zambians are logically less likely to sign up for or even trust SMS updates if they do not know anything about the service.

Word-of-mouth is another effective conduit for informing a target audience about a new SMS or phone service - though it is also often the most difficult to tap into. Some 50 percent of low-income respondents and 57 percent of those with a primary education said they get news and information from other people in their community (outside their friends and family) at least weekly.

Mobile kiosk operators and local mobile phone content and service providers have the potential to be conduits for mobile communication information in communities. These community actors are often the most likely individuals to know how to troubleshoot when a phone malfunctions or to be that crucial interlocutor who helps transfer top-up credits between phones. Being able to identify and inform these formal and informal service providers about a SMS-based or other mobile-based service can go a long way in reaching a target audience.

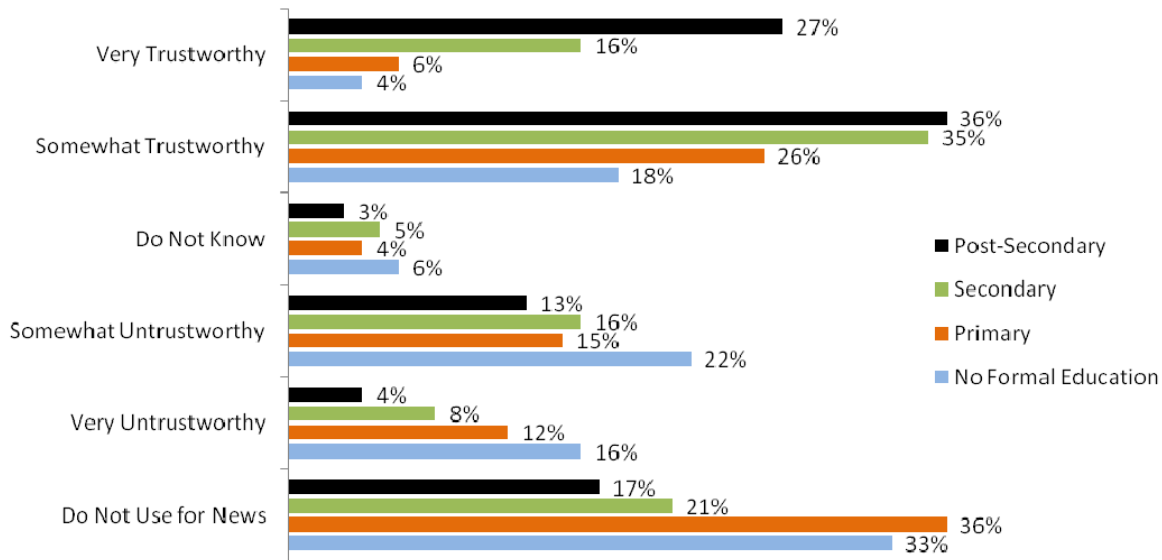
Ila. Trust in SMS

People may not pay much heed to news or information delivered from sources that they do not generally trust - hence our reasoning for asking respondents about their level of trust in SMS-delivered content. **The survey results suggest demographic groups who are more trusting of SMS content are those who are more frequent mobile phone users and weekly SMS news receivers. The implication is that familiarity with mobile communications has sensitized Zambians to the notion that a mobile phone can be a trustworthy information-gathering tool.**

Figure 2.2

Zambia: Trustworthiness of SMS-based News and Information Services

Percent of weekly mobile phone users choosing that degree of trustworthiness; broken down by education level



AudienceScapes National Survey of Zambia April 2010: survey of adults (15+) who use a mobile phone at least weekly N = 1158

Those with less education, for example, tend to have less familiarity with the SMS news concept and are thus more likely to have less trust in it (or to say that they "do not know" whether they trust it). **There was little difference in trust levels between urban and rural respondents among those who have familiarity with the SMS news concept.** The lack of difference between these groups, even though SMS news is not heavily used in rural areas, leaves room for optimism, that they are more exposed, rural mobile phone users and the less privileged will take up these services or have greater trust in them.

IIb. Spreading the Word: SMS Message Sharing Patterns and their Development Potential

Given the importance of word-of-mouth communication as a conduit for spreading information, researchers recently have begun to look at how such networks replicate and/or extend through mobile communications. Much of this research has a commercial focus on the impact for m-commerce and mobile viral marketing.ⁱ

From a development perspective, if SMS message exchanges develop similar patterns as familial or communal word-of-mouth networks, mobile communications have the potential to be an extremely potent means of sharing important development information.

To explore the potential of SMS messages as an information dissemination and sharing tool, the AudienceScapes research team tried to determine the extent of SMS forwarding activities

- how many and which types of people are passing along messages to others, how frequently they are doing so, and what sorts of message topics tend to be shared.

SMS forwarding appears to be a limited activity in Zambia so far; SMS forwarders are only about 7 percent of regular mobile phone users. Some 44 percent of regular mobile users who receive SMS news reported “never” forwarding a message. Another 30 percent said they do so “rarely”.

Figure 2.3

Zambia: Demographic Makeup of SMS Forwarders Percent of SMS Forwarders within that demographic group			
Percentage of Weekly Mobile Phone users: 7 percent			
Age		Education	
15-29	64%	Post-Secondary	53%
30-44	23%	Secondary	40%
45-59	10%	Primary	7%
60+	3%	No Formal Education	0%
Gender	Men: 69% Women: 31%	Location	Urban: 60% Rural: 40%
AudienceScapes National Survey of Zambia April 2010: survey of adults (15+) who “often” or “always” forward SMS news to other individuals N =88			

Demographically, SMS forwarders are predominantly youth/young adults (or YYAs, those 15-29), male, and have at least some secondary education (Figure 2.3). The majority of the group is relatively affluent, with nearly 73 percent residing in either upper-middle- or high-income households. Thus, **the more privileged demographic groups seem willing to incur the cost of forwarding an SMS. That said, there is room for optimism that SMS forwarding will expand beyond this group, given that YYAs are again leading the way and the cost of mobile communications continues to fall in Zambia.**

Respondents were also asked to identify what types of news and information they typically forward to other people. Although the range of topics was fairly broad, **those leading the pack included current affairs, sports and cell phone promotions.** Other less popular topics were entertainment, business, and politics.

Figure 2.4

SMS Forwarding: A Limited Practice

Fifty-five percent of survey respondents are weekly mobile users, but only 16 percent of this group access SMS news at least weekly and an even lower percentage forward these messages to others.

SMS as Source for News and Information

Sixteen percent of regular mobile users receive weekly SMS News

SMS Forwarders

Four percent of Regular Mobile Users

Twenty-five percent "always" or "often" forward these messages

Forty percent "Never" and 30 percent "Rarely" forward

What type of information do you forward?

Current Affairs: 23 percent

Sports: 17 Percent

Promotions: 15 percent

ⁱ Palka, Wolfgang; Key Pousttchi and Dietmar G. Wiedemann. "Mobile word-of-mouth - A grounded theory of mobile viral marketing". *Journal of Information Technology*. Volume 24, Number 2, 17 June 2009, pp. 172-185(14).
And Okazaki, Shintaro. "Determinant factors of mobile-based word-of-mouth campaign referral among Japanese adolescents". *Psychology and Marketing*
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