

Remaining Questions from the Webinar:

It would interesting to know what's more effective, when communicating with users, SMS or calls.

David: Calls...by far. Low literacy rates remain a major obstacle to SMS-based communications campaigns. Here's a summary of information we've collected in the countries where we plan to launch the 3-2-1 Serfi

Country	Survey	Total	Total
Burkina Faso	2014 MIS	4.7	29.7
Cambodia	2014 DHS	15.9	76.1
Congo Democratic Republic	2013-14 DHS	6.6	63.8
Madagascar	2013 MIS	26.7	70.2
Malawi	2014 MIS	38.8	72.3
Mali	2012-13 DHS	1.1	20.6
Mozambique	2011 DHS	14	40.2
Niger	2012 DHS	2.2	14
Nigeria	2013 DHS	1.8	53.1
Tanzania	2010 DHS	50.7	72.2
Uganda	2014-15 MIS	20.2	66
Zambia	2013-14 DHS	13.8	67.5

What's the experience been with buy-in from local farmers to access on a regular basis?

David: I'm not sure I understand exactly what Lily wants to know. One experience we can share is that 3-2-1 Service "power users" are better Airtel subscribers: more loyal, spend more on their phones each month, etc.

You mentioned that you can collect a lot of data that you can make use of. How do you deal with data privacy issues?

David: This is a good question. Data security and data privacy are major concerns of ours. One thing that's important to understand is for the 3-2-1 Service, we collect metadata: telephone number, time/date stamp, menu decisions, key message selected, whether the caller listened to the entire message, etc. This information is less sensitive than, say, electronic medical records, but we take data security and privacy very seriously. To give you an example, we don't share the telephone numbers of 3-2-1 Callers with outside agencies for any purpose.

Is it in only one or multiple languages in the countries?

Rikin: IVR services do function in different languages (incl. Multiple in the same country). That includes both the prompts within the IVR service as well as the content itself (which often features local farmer voices in local languages that the peers who listen into the service can identify with and trust).

David: We offer the 3-2-1 Service in as many languages as necessary to reach the majority of the population. In Madagascar and Malawi, we're lucky: we need just one language. But in Ghana, we offer the Service in 5 languages.

What is the biggest challenge to scaling this service?

David: The single greatest impediment to scale is cost to the end user. Some projects use what I call the "PPP" model: Poor People Pay. This model won't scale because the farmers who need this information the most cannot afford to pay for it. So one reality we face is we have to design a system that is financially self-sustaining WITHOUT charging the end user. Once we overcome that hurdle, then there are two additional obstacles: Promotion (smallholder farmers need to know the Service exists) and quality of content (we need to work on a continuous basis to make sure the content is relevant to smallholder farmers).

Can IVR include basic financial operations, like payment of a service or receive payment at harvest?

David: The short answer is yes. In the US, you can use IVR Services to pay by credit card, for example. In developing countries, it's more challenging. Smallholder farmers don't have credit cards. New mobile money services offer lots of hope, but in many countries the telecoms haven't developed the necessary Application Program Interface (API) to automate these transactions. But I do believe this is coming and I think it could be a game-changer.

Are there similar systems being utilized nationally for Tribes and First Nations countries?

David: I don't know...but I hope so!

But, how is 3-2-1 sustainable? I'm sure costs are incurred to develop that content.

David: Think of the 3-2-1 Service as a new communication channel that is an alternative to radio or television. Radio and television stations operate as sustained services in the developing world. One way they do so is by “selling space” on their airwaves. If you are operating a project in a resource-poor country and have a “social and behavior change” or “community outreach” component, you need to communicate your messages to your target groups. You have a variety of different options (radio, television, interpersonal communications). We see the 3-2-1 Service as a new alternative that has some important advantages (example: available on-demand, free of charge on your own simple mobile phone). So our goal is to offer the 3-2-1 Service as a sustained service much like other communication channels.

I believe in David's talk he said that 10 messages are free. To understand, if 10 messages are sent to receivers and then the receiver calls a center for information, would that 11th transaction be charged? Or are all of the messages pushed out free and anything that is initiated by the subscriber count towards the 10?

David: No. The 3-2-1 Service is primarily a “PULL” channel. Smallholder farmers pro-actively call the 3-2-1 Service at a moment of need and PULL the information. They dial “3-2-1” and hear the welcome message. The welcome message has a menu (“push one for information about public health. Push 2 for information about agriculture...”). Callers select a topic by pushing a number on their phone. They then listen to a pre-recorded key message (“Here is the five day forecast for Blantyre...”). A smallholder farmer can call the 3-2-1 Service 10 times each month, for free. At the end of every key message, the caller hears, “If you would like to opt-in to receive free SMS messages on this subject, press 1”. Once they opt in, the 3-2-1 Service becomes a PUSH channel for that farmer. As an example, in Malawi, we push out agricultural SMS to thousands of farmers every weekend.

SPRING is very interested in how nutrition-sensitive agriculture information is integrated. Can you talk a bit more about the nutrition content, and how nutrition may be integrated in other options on the 3-2-1 menu?

David - Yes! Please contact me at dmcafee@hni.org. We will soon greatly expand our nutrition content in collaboration with the GSMA. We'd love to find new partners to work with.

Who is 3-2-1 partnering with in Ghana? Do you know? Very interesting.

David: We just launched the 3-2-1 Service in Ghana on April 12th in collaboration with Vodafone. If you're in Ghana now and have a Vodafone telephone, call 3-2-1 and try it. We're offering the 3-2-1 Service in five languages, including English. For the launch, we started with four topics: Health, Water/Sanitation, Weather and News. We work with some of the big Public Health NGOs in Ghana (MSI, DKT) to create the Health and Wat/San content. We'd love to partner with others.

David, can the user call in and ask question outside your pre-configured options?

David: Yes. Farmers have a variety of ways to ask questions. We're experimenting with a bunch of different options:

- 1) Leave a voice message*
- 2) Talk to an operator, who notes the question*
- 3) Be automatically routed to a call center to speak with an expert*
- 4) Ask a question publicly to other 3-2-1 Callers*

David, when are you launching in Uganda?

David: Optimistically...May 2016? But more realistically June/July. We have to install our own equipment in the data centers of our telecom partner and this takes time.

David, will you be implementing the same system 3-2-1 in Afghanistan? How soon?

David: Yes. I was in Afghanistan in March at the invitation of the International Labour Organization. They're interested in the 3-2-1 Service approach. I had the opportunity to pitch the 3-2-1 Service to all four major telecoms. There was a great deal of interest in the partnership model. As such, I'm optimistic we can launch the 3-2-1 Service in Afghanistan...probably in early 2017?

Is there a cost associated with 321 service if someone is accessing from a different cell provider (i.e. orange v. claro in Caribbean)?

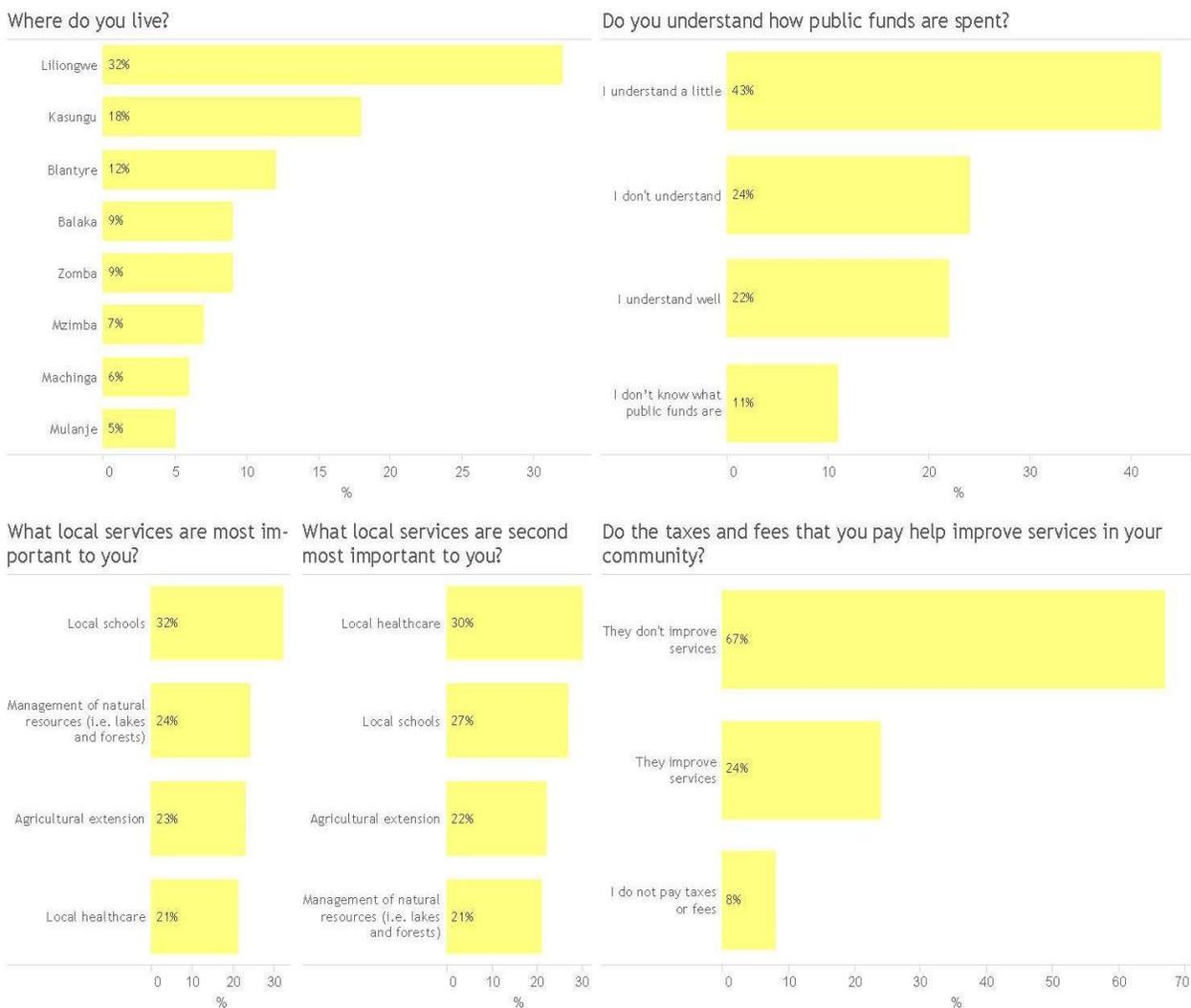
David: Great question! Our long term goal is to make the 3-2-1 Service available free of charge on every single phone. But the 3-2-1 Service idea is still new. So to get started, we sign an exclusive deal with one telecom provider. However, we time-limit that exclusivity (usually 1-2 years). In the agreement we sign, our exclusive telecom provider does make the 3-2-1 Service available to "off-network" callers, but these callers have to pay the normal rates. To achieve our long-term goal, we plan to approach the telecom regulator in each country and advocate that the regulator place the 3-2-1 Service on the list of toll-free short codes that EVERY telecom must make available to their subscribers (the local equivalent of 911 and 411). We hope to demonstrate that the 3-2-1 Service is a "public good" and should be considered for this list.

Can you share approximately how many active users you have in Cambodia?

David: None! We haven't officially launched yet. We're still testing the system. But if you're in Cambodia and have a CellCard phone, you can dial 321 and try it for yourself. We hope to launch in May.

David, you mentioned a push method briefly in your talk. Could you expand on how much the push service is used currently or how you're hoping that it will expand?

David: Farmers “opt-in” to receive push messages. In Malawi, each weekend we push out thousands of agricultural-related SMS messages to those who have opted in. I’m really excited about the extreme weather alerts feature. Farmers can opt in to receive extreme weather alerts for their location. When extreme weather alerts occur, we can push messages out to them. We’re also beginning to send out automated surveys to 3-2-1 Callers who opt in to give their opinions. Here’s an example of some of the results:



David, what is your presence like in Zambia? Also how are you providing individuals with tailored advisors especially with us here in Zambia having 72 languages.

David: Olivia Bell is HNI's Program Manager in Zambia. You can reach her at olivia@hni.org. We work with our partners in each country to determine the right number of languages. We have to strike a balance between making sure the information is accessible to the majority of citizens while also considering the logistical and financial costs.

Would be interesting to learn more about the business model, especially who provides content and who pays?

Rikin: Our approach is to institutionalize the day-to-day aspects of content production, dissemination, and data/feedback collection into the existing public, private, and civil society extension organizations that we partner with -- not to create a parallel one. It is these same agencies, like the Ministry of Agriculture in Ethiopia or a private agribusiness,, that produces content and pays for doing so using ICTs just as it did without ICTs. The Government of Ethiopia, for instance, pays its extension staff to produce content for the IVR service and provides free access to the IVR service to farmers as a part of its public extension system. This helps with sustainability and also ensures alignment with the bricks-and-mortar extension system as it provides access to various types of products and services (some subsidized and others not) across agricultural value-chains which are key to enable farmers to translate information into tangible value.

What percentage of number of calls are made by small rural farmer?

Rikin: Nearly all of the calls are made by small rural farmers (esp., since 95% of landholdings in a country like Ethiopia are small). The Government of Ethiopia's IVR service has reached more than 1.5m farmers; however, it is true that ICT-enabled services, especially IVR, aren't always inclusive. For instance, those who have access to phones tend not to be the smallest (or lowest income) farmers and are more men than women.

Rikin, is there an option from the server to understand number of repeated requests - request type, caller, and geographical distribution?

Rikin: IVR servers automatically log which phone numbers are calling into them, for what duration, etc., so it is able to determine whether the same number called multiple times. In some countries, phone numbers can be used as a proxy to identify the geography where the user is from (e.g., area codes), but in others, that's not possible if telecom operators assign phone numbers arbitrarily. It is possible to have users register themselves when they first dial into an IVR to ask them to self-report their gender, crop interests, etc. which can be useful to analyze data more closely; however, we have found it important to not make that registration too cumbersome for a farmer (esp., since those who have limited to no experience working through a set of automated IVR prompts).

Do you use the location of the farmer in order to make content more specific?

Rikin: Yes, it is key to have content be location-specific (esp., to feature local farmer voices that peers can identify with and trust, to be targeted toward unique agroecological conditions). In Ethiopia, for instance, Awaaz.De has been working with Government of Ethiopia's IVR service to distribute woreda (district)-specific messages. This does require farmers to do a one-time registration of which woreda (district) they're calling from, but then allows them to receive more custom content and also to link more closely with the bricks-and-mortar extension service in their vicinity.