

AGRILINKS



Interactive Voice Response: Its Growing Role in Agricultural Extension Services

April 14, 2016

Speakers:

Rikin Gandhi, *Digital Green*

David McAfee, *HNI*

Neil Patel, *Awaaz.De*

Moderator:

Judy Payne, *USAID Bureau for Food Security*

Facilitator:

Dana James, *Feed the Future Knowledge-Driven Agricultural Development Project*

Judy Payne



Judy Payne is USAID's ICT Advisor for Agriculture, where she helps USAID Missions and their projects around the world use information and communications technologies as a tool for economic growth and agriculture development. Her work includes helping USAID's implementing partners find ways to use ICT-enabled approaches to increase their projects' success in sustainable and scalable ways.

Rikin Gandhi



Rikin Gandhi is the Chief Executive Officer of Digital Green. He studied the use of technology for agricultural development in Microsoft Research's Technology for Emerging Markets group. He has a master's degree in aeronautical and astronautical engineering from MIT and a bachelor's degree in computer science from Carnegie Mellon University.

David McAfee



David McAfee is the President and CEO of Human Network International, a non-profit organization he co-founded in 2007. HNI's mission is to provide organizations and individuals the opportunity to use information and communication technology in innovative, productive and sustainable ways. In 2010 HNI launched the 321 Service, a search engine where there is no Internet. HNI is currently scaling up the 321 Service in 15 African and Asian countries. Mr. McAfee has over 25 years of development experience beginning in Peace Corps in Gabon. Mr. McAfee was the PSI Director in Rwanda and Madagascar and Regional Director for southern Africa.

Neil Patel



Neil Patel is the Co-Founder and CEO of Awaaz.De. Patel holds bachelor's degrees in computer science and business from UC Berkeley, and a doctorate in computer science from Stanford University. He completed his dissertation on a mobile voice-based social platform for small farmers in India to access and share agricultural advice. The system was a success, and organizations across India (agriculture, health, education, women's empowerment, labor, microfinance) asked him to help apply the same technology to their own information dissemination and communication needs. Working with his advisor, UC Berkeley Professor Tapan Parikh, led Patel to the founding of Awaaz.De.

Interactive Voice Response

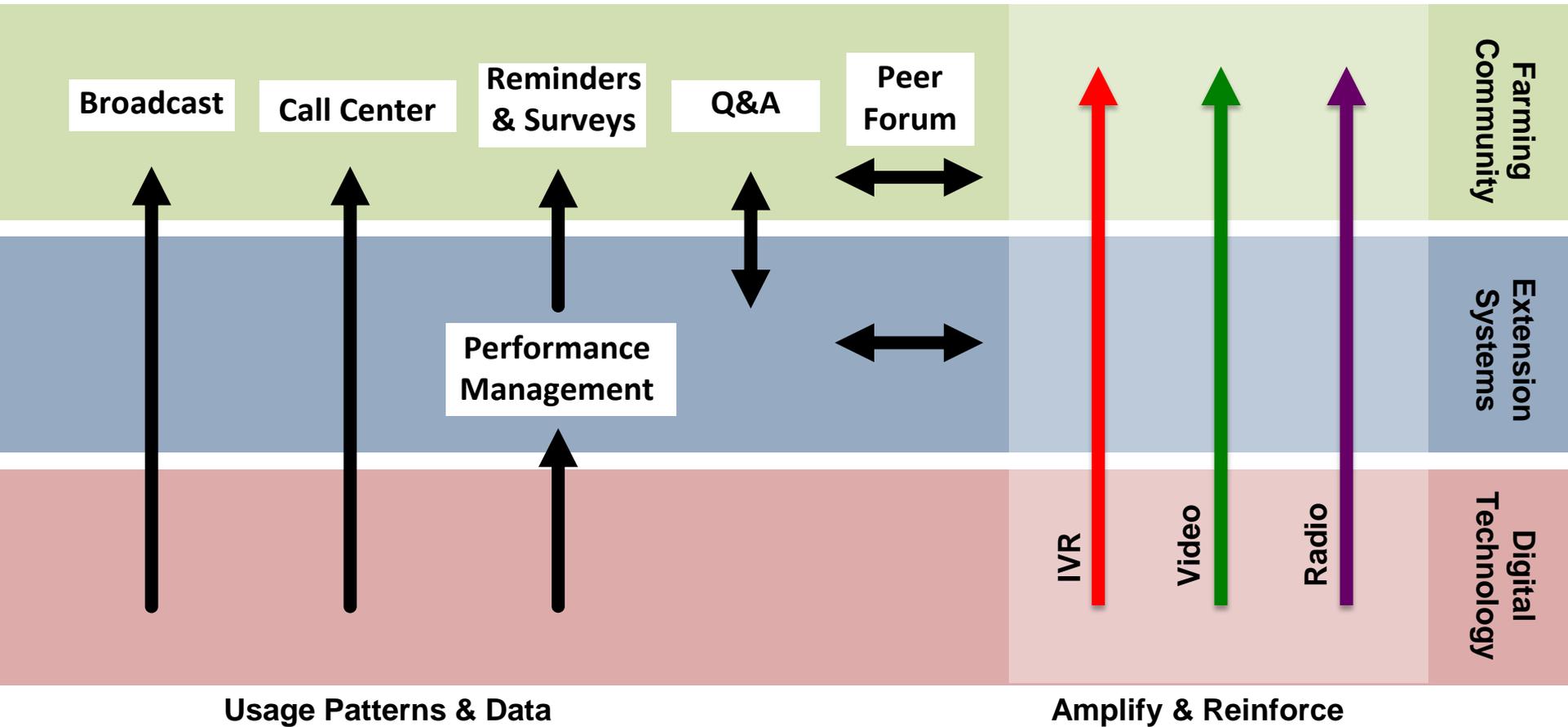
Interactive & targeted knowledge exchange



- Voice Based
 - Interactive
 - Broadcast
 - Targeted
-
- Data
 - Voice Recordings
 - Programmable
 - Call Center

IVR for Agricultural Extension

Interactive & targeted knowledge exchange



Usage Patterns & Data

Amplify & Reinforce

IVR providers offer functionality to support common use cases but differ in target audience, geographies, and advanced features.

				
Broadcast	Yes			
Call Schedule	Yes			
Call Back	Yes			
Voice Recording	Yes			
SMS	Yes			
Voice & Touchtone	Yes			
Multi-level Call Menu	Yes	Yes	Yes	Yes
Web UI	Basic	Advanced	Advanced	Advanced
Built-in Analytics	No	Yes	Yes	Yes
API	Yes	Yes	Yes	No
Customizability	High	Moderate	High	Moderate
Transfer to Agent	Yes	Yes	Yes	No
Target Users	Techies	Both	Both	Non-techies
# of Countries	Low	Moderate	High	High

Interactive Voice Response: Its Growing Role in Agricultural Extension Services



USAID
FROM THE AMERICAN PEOPLE



Human Network
INTERNATIONAL



How does it work?

Callers dial 3-2-1 and listen to public service information in the local language anytime, anywhere, free of charge

Thank you for calling the 321 Service a new service that provides you with useful information. You can call this phone number for free, 10 times each month. After the 10th call, you pay just \$0.04 for each call.

You have 8 choices. Listen closely to these subjects, then make your choice. Would you like to know about:

- | | |
|------------------------|---------|
| Gender | Press 1 |
| Health | Press 2 |
| Agriculture | Press 3 |
| Micro finance | Press 4 |
| Water and Sanitation | Press 5 |
| Land Title | Press 6 |
| Family Planning | Press 7 |
| Emergency Preparedness | Press 8 |

If you have questions, comments, or suggestions about the 3-2-1 service, please call the free number 033 65 00 321. If you want to hear your choices again, press the # button.

Malawi 3-2-1 Service Menu



Real-time Analytics

Multiple Choice Question

321 Welcome message

Voice 3259008 SMS 8045 USSD 97699

Responses Trends

Entered 3364752

Completed via 1 – 360622

Completed via 2 – 278724

Completed via 3 – 206215

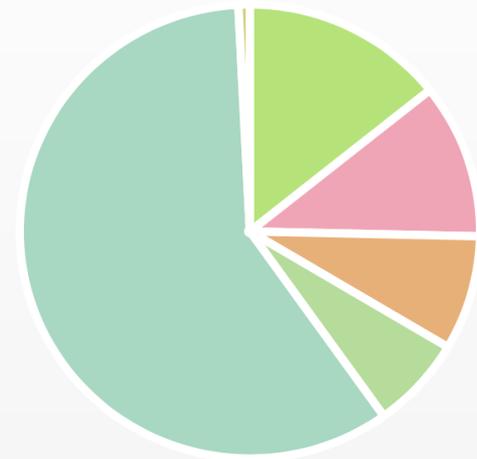
Completed via 4 – 166678

Completed via 5 – 1490618

Completed via 6 – 20182

Hung up 841713

1. Health	14%	360621	■
2. Agriculture	11%	278721	■
3. Nutrition	8%	206216	■
4. Gender	7%	166674	■
5. Weather	59%	1490608	■
6. Registration	1%	20182	■
<i>Total Responses</i>		2523022	



Who owns the 321 Service?

The telecom does...and they promote it

www.airtel.com

**antsoy maimaimpoana ny "321" !
Tolotra Mandroso, mampivoatra
ny fiainanao**

Na an'ny firy na an'ny firy, mianaho torohivitra sy fahafahana mahaso ny fiainanao isan'andro !

• Antsoy ny "321" ary anaho ny toerana ka ahazoana loay (sakafo, fitaovana)

Fahasalana	Fianantany
Fambolena	Rano sy fahafiviana
Fidirana-m-bola madinika	Fandriana fiterahana

• Antsoy ny "321" nata tsy-batavo torohivitra maimaimpoana tsy-batavo

• Mifidy an'ny firy "Rano" (Mena, Telo "airtel", telo "Service Mandroso") nahafahana SMS maimaimpoana monina ny Fahasalana.

Mpanjifa mahazo ny 000 000 eo afa an'ny fahafahana ny tolotra ny mpanjifa ny firy.

* Antsoy fampiasa ny fahafahana ny 321 maimaimpoana tsy-batavo ny firy maimaimpoana.

airtel

TOLOTRA MANDROSO
TOROHEVITRA MAHASOA HO AN'NY
FIAINANA ANDAVANANDRO
Antsoy maimaimpoana* ny 321
na tsindrio ny *321#

www.airtel.com/mandroso

321

Mifidy fahafahana ny fahafahana ny fahafahana	Fahasalana	Fianantany
Fambolena	Fidirana-m-bola madinika	Fiterahana fiterahana
Rano sy fahafiviana ary fahafiviana	Fidirana-m-bola madinika	Fiterahana fiterahana

* Antsoy fampiasa ny fahafahana ny 321 maimaimpoana tsy-batavo ny firy maimaimpoana.

Who pays for the 3-2-1 Service?

Content

B to B model
HNI Sells Space
Sponsorships



Motivation:
Making their messages
available on
simple mobile phones

Marketing



Motivation:
Reduce churn rate, Generate revenue,
Educate new users, CSR

Traffic



Why would Airtel give away +40 years of airtime?

Decrease in Churn	16% - 20%
Increase in ARPU	5%
Increase in Outgoing Voice	9%
Increase in Outgoing SMS	28%
Subscriber Base Penetration	7% - 10%

Translation:

“Give voice.”



Neil Patel
neil@awaaz.de

About Awaaz.De

Mission: Enable **social change** in underserved communities through **inclusive mobile solutions** and services.

5M phone calls to
600,000+ users for
180+ clients across 23
Indian states and 6
countries

Awards & Accolades

GSBI Accelerator 2016



Gates Foundation
Grand Challenges
Exploration Award 2015



Sankalp Artha Grand
Prize 2013



Mashable Startups for
Good 2012



Action for India Growth
Prize 2013



Tech Awards Laureate
2011



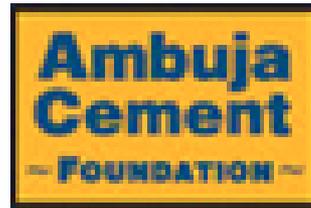
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Awaaz.De

Awaaz.De for Agriculture



digitalGREEN



Awaaz.De for Ag Extension

Client/Service	Service	Location	Number of Farmers
Jatan Trust - Sajiv Kheti Samvaad	Discussion Forum	Gujarat, India	9,200
Khedut Saathi	Push Messaging	Gujarat, India	17,000
Ethiopia ATA	Question and Answer	Ethiopia	1.2M

Sajiv Kheti Samvaad

- “Organic Farming Conversation”
- General Information (FAQ, announcements)
- Farmer-to-farmer discussion
- Buyer-seller marketplace (347 messages)
- Launched Jan 2011
 - 266 questions, 286 responses
 - 1100 broadcasted announcements (500 replies)



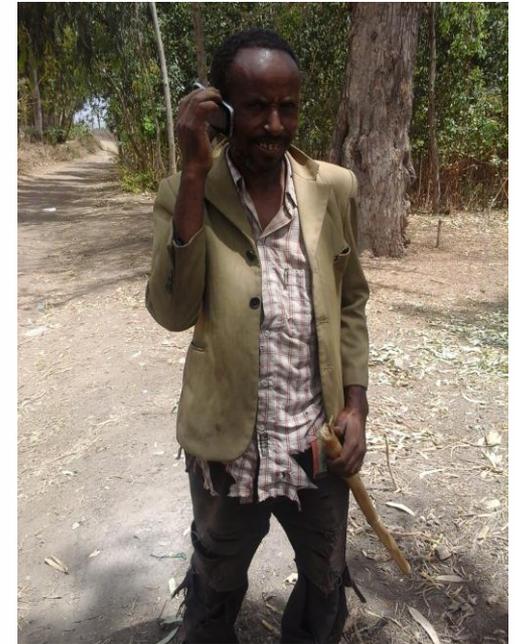
Khedut Saathi

- “Farmer’s Friend”
- Crop-specific push content
- Peer content preferred to “Expert” content
- Forward-to-friend
- Advertising campaigns
- Launched Sep 2013
 - 17K farmers subscribed
 - Highly sticky: 70%+ pickup rate, ~4% opt-out
 - Forward-to-friend used by 4,800 subscribers



Ethiopia ATA 8028

- AD connected to ATA through DG/USAID Consortium
- Was static IVR + profile collection, added Q&A
- Pilot 16 woredas March-May (80K farmers)
- Till date
 - 2400 questions, 2021 “Accidental Entry”
 - 150 “legit” questions (unverified)
- ATA wants to add FAQ, Surveys



IVR For Extension - Key Challenges

- Country-specific technical setup
- Awareness
- Interactivity
- Cost

Thank you!



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TOP TAKE-AWAYS

1

IVR: Not plain vanilla anymore!

Many think of IVR as a simple, static tool for delivering ag information, and less helpful to farmers. We've now learned how IVR can be versatile, compelling, and can "push" info tailored to farmers.

2

IVR magnifies human intent & capability.

Successful use of IVR requires support from well-intentioned, competent people and organizations.

3

IVR's limitations:

Hard to navigate, technically challenging to implement, and expensive at scale.

4

IVR's key advantages:

Overcomes language and literacy, and there is a low barrier for user-generated content.

5

Content is king!

IVR is only as useful as the content you deliver through it.

Questions and Answers

JOIN THE DISCUSSION

agrilinks.org

Contact: jmaccartee@usaid.gov or zbaquet@usaid.gov

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