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Na Antena Nacional
Estreia dia 02 de Novembro!
Acompanhe todas segundas das 08h15-08h30 e 17h15-17h30

Nova Radionovela

JANETE
NADA É IMPOSSÍVEL

Parceiros:
Suécia Sverige · TechnoServe Soluções Empresariais para a Pobreza · WIN WOMEN IN BUSINESS · anima

Radio as a Part of a Remote and Blended Learning Strategy

An overview of suggested approaches and TechnoServe experience

November 2020

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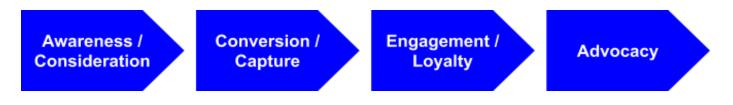TechnoServe
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Executive Summary

Radio is a powerful medium for reaching a large number of people, especially in rural communities. It is most appropriate as a supplemental communication channel for rural and less technically connected users. This document is designed as an internal TechnoServe resource to highlight a few examples of how other organizations are using radio, as well as our experience with radio as a part of a remote and blended learning approach.

USER ENGAGEMENT JOURNEY TO BUILD A RADIO STRATEGY

 A successful radio program used as part of a distance learning strategy needs to 1) attract an audience and 2) encourage that audience to learn more and ultimately change behavior. After you determine that radio/audio content is appropriate based on your beneficiary user profile, the user engagement journey is a helpful guide for designing program content and distribution strategies that will speak to your target audience. **Always consider the user engagement model first,** *then* **consider what tools or approaches are appropriate.**

The User Engagement Journey

The User Engagement Model is described in more detail later in this document, and has important implications for implementing radio in your programs.

CREATING AN AWARENESS CAMPAIGN

Think of your radio strategy as a part of a larger "brand awareness" campaign for your program.
In addition to the User Engagement Model, there are several other important considerations for incorporating radio in a remote and blended learning program.

1. **Content quality and relevance is critical.** The content needs to be entertaining and relevant to the audience. Content must be of high quality and users should see themselves reflected in the content, especially where you are trying to create aspirational role models to drive changes in behavior.

2. **Ensure maximum reach by leveraging multiple distribution channels.** Build a "content constellation", repackaging and re-using content and scripts from one audio format for other formats to reach different audiences. Schedule programming delivery according to the lives of your target population.

DIFFERENT APPROACHES FOR USING RADIO

Depending on program needs and the area of emphasis in the User Engagement Journey, several different approaches are possible using radio:
  ● **"Edutainment"** - a radio drama, television drama or similar program that emphasizes and promotes specific social norms and behaviors

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- **Public service announcements** - short advertisements emphasising a particular behavior or activity, or directing users to the availability of a new service offering
- **Pre-recorded shows** with one or more experts in a field
- **Live call-in shows** addressing a specific topic

CONTINUING THIS WORK

We plan to continue discussions internally, with other development organizations, and with experts on the use of radio. We will release updated versions of this document as we continue to expand our knowledge base.

If you have additional insights and experience to share where TechnoServe has used radio for training programs, please contact us.

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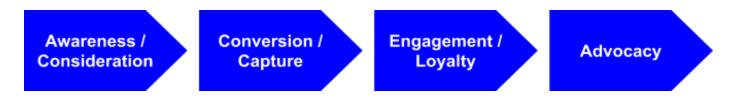
Radio as Part of a Communications Strategy

THE USER ENGAGEMENT JOURNEY

Radio needs to be considered in the context of a program's overall communications strategy, and based on the profile of user beneficiaries in the program. First, consider the profile of target users. Radio is most appropriate for training programs for users in User profiles 0-2.

	User profile 0	User profile 1	User profile 2	User profile 3	User profile 4
Literacy	Illiterate	Illiterate or Numerate	Semi-literate	Literate	Literate
Tech access	• Radio and/or TV • No phone	• Radio and/or TV • Feature/text-only phone or Smartphone	• Radio and/or TV • Feature/text-only phone or Smartphone	• Radio and/or TV • Smartphone	• Smartphone • Laptop
Internet access	No, none in home or nearby	Variable, access to mobile data for those with smartphones	Variable, access to mobile data for those with smartphones	Yes, access to mobile data and/or Wi-Fi	Yes, access to mobile data and Wi-Fi
Suitable tech	Radio, TV	Radio, TV	Radio, TV	Messaging/SMS, social media	Messaging/SMS, social media
		Phone calls, Voice Messaging	Phone calls, Messaging/SMS	OLPs, video calls	OLPs, video calls
Est. # of TNS programs	1	13	29	9	22
Example program	ProSoja	HERZ	BWC Mozambique	ResCA	Madre Tierra

Next, map out the "User Engagement Journey" and determine where communication via radio and audio is needed in the learning process, e.g. Are you using it to introduce a topic? Or to offer an opportunity for people to learn about it in depth?

Fig 2: The User Engagement Journey

Awareness / Consideration → Conversion / Capture → Engagement / Loyalty → Advocacy

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This is a simplified version of the customer engagement journey for buying a product or service.

> **First, you generate interest in the product, or in the case of a training program, in the content of the training itself.** Users have to be able to relate to the topic, and to answer the question "Why do I care about this?"

> **Second, you get users to engage, respond and commit.** In the case of a product, you get them to respond to a promotion and to purchase the product. In the case of a training program, you need to get them to engage in the training program.

> **Third, users become engaged and loyal to the program.** In the case of a product, they continue to buy or use a specific brand of the product. In the case of training programs, they believe in the value of the program for their farms and businesses, and are willing to invest their time to learn more.

> **Finally, users become advocates.** They recommend the product (training program) to their friends.

Table 1: Stages of the User Engagement Cycle

Stage	Description	Tools
1. Awareness / Consideration	● Generate interest ● "Why do I care about this topic?"	● General education programming ● "Edutainment" ● Short form programming, e.g. 30sec - 3min segments and PSAs (Public Service Announcements)
2. Conversion / Capture	● Conversion or capture point for a user. ● Get users to engage, respond and commit. ● "I am willing to sign up to commit my time and/or money to learn more."	● Awareness content from (1) integrated with and adapted to other channels ● SMS, IVR, email, web contact links to "capture" users

3. Engagement / Loyalty	● Adoption, practical application happens here.
	● Users invest time and believe in the value of the learning content.
	● "I am spending my time to go deep on a topic that has proven value to me."
		● "Lean-in content" such as:
		  ○ 15min recorded call-in shows
		  ○ Radio Q&A sessions
		  ○ Podcasts/WhatsApp recorded trainings
		● Integration with social media
		● Use of brand "celebrities" developed in prior stages to reinforce engagement.

4. Advocacy	● Users spread their interest and advocate for others.	● Social media ● Recycled/re-used content from above

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	● "I am proud to be associated with this program, and I want to share my interest and knowledge with others."	

Always consider the engagement model first, then determine what tools are appropriate to use. For example, a pre-recorded call-in show with agronomic techniques could be perfectly appropriate for beneficiaries that are already engaged, but may be less effective for beneficiaries who have not yet been convinced that they need training.

THE AWARENESS CAMPAIGN

The experts we spoke to emphasized that you should view your radio strategy in the context of a larger "brand awareness" campaign for your program. In addition to the User Engagement Model, there are several other important considerations for incorporating radio in a remote and blended learning program.

1. **Content quality and relevance is critical**
   The content needs to be entertaining and relevant to the audience in addition to being appropriate to where they are in the User Engagement Journey.

   First, **programming must be of high quality**. People will not listen to low quality content.

   In the article "The Entertainment-Education Strategy in Communication Campaigns" summarized in the appendix, one of the key points they make is that media campaigns must be 1) popular and attract the highest possible prime-time audience, 2) very high quality, 3) win-win for government, media, private corporations, and donor groups - honoring commercial and social objectives.

   Second, **programming content must be relevant to local users** and people should see pieces of themselves reflected in the content. This is especially important where you are trying to create aspirational role models to drive changes in behavior.

2. **Ensure maximum reach by leveraging multiple distribution channels**
   Consider how content from one audio format can be repackaged to generate content for another format. Build audio content and scripts that can be re-used in multiple formats to reach different audiences.

   "You need to think of yourselves as producers. Each piece of content that you produce should be able to be used in multiple different forms. Create a 'content constellation'"
   - Former Director, National Public Radio (US)

   For example, the TechnoServe WIN program in Mozambique created 26 15-minute radio dramas. These dramas were also edited down to a short three minute "mini" version delivered via IVR (interactive voice response). The same content could also be distributed as voice notes over WhatsApp.

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Schedule programming according to the lives of your target population. Consider *how* (radio? IVR?), *when* (daytime? evening?) and *where* (work? commute? home?) users will listen to the content. This will impact your choice of distribution channels.

USER "CONVERSION AND CAPTURE"

With an overall strategy based on the user engagement model and a clear plan for generating content, you can use different channels to distribute content at different points along the journey. Different channels can complement each other, e.g. having a call to action to text a specific number based on a radio awareness campaign.

For example, the BeninCajù program coordinated a phone campaign with its radio programming. While the initial pilot showed limited numbers of farmers calling the support number, several changes were identified that should increase farmer responses to phone training and support in the future.

In Ethiopia, the government used radio promotions to get farmers to use their "8028" hotline program for information about agronomic practices and pest management. "Conversion / capture" happened when farmers called into the hotline and registered for the service.

ENGAGEMENT

In Nigeria, the Yieldwise program used Farm Radio International and its "Uliza" services to generate engagement with the Yieldwise program. Uliza is an innovative "suite of services that combine radio, mobile phones and, often, interactive voice response systems to enable listeners to communicate and exchange information with their radio station quickly, easily and free of charge".

Farm Radio International also uses other means to generate community engagement, in particular to increase participation by women. For example, as a part of setting up radio programs, they often create listening groups for women, because they found that while women have access to a radio, they may not control the radio. They provide listening groups with solar powered portable radio receivers that can *record* radio programs, so that the groups can listen to programs again. Calls for dial-in programs are free to callers, and where possible programs are interactive, with Q&A during radio programs designed to ensure listener understanding.

ADVOCACY

In several of the radio mid-term and final evaluation reports, a common metric was whether listeners shared learning from the radio program with their peers. In more successful programs, more beneficiaries discussed the program with others.

The Ethiopia 8028 program accidentally discovered that some users were calling in 30-40 times from the same number! They discovered that they had advocates - people in the field showing their peers how to use the service, and calling on their behalf. They used radio to promote the 8028 dial-in program, and inadvertently created advocates. The program is now considering setting up a "Genius Bar" in rural telecom offices where people can walk in and get trained.

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Tools and Approaches for Using Radio in Distance Learning

Depending on program needs and the area of emphasis in the User Engagement Journey, several different approaches are possible using radio:

- **"Edutainment"** - a radio drama, television drama or similar program, typically offered in a series over a number of weeks, that emphasizes specific social norms and behaviors, especially through aspiration by creating characters that listeners can identify with. Quiz / trivia shows and interview programs are other forms of edutainment, but which are also more interactive ways of using radio.
- **Public service announcements** - short advertisements emphasising a particular behavior or activity, or directing users to the availability of a new service offering
- **Pre-recorded shows** with one or more experts in a field
- **Live call-in shows** addressing a specific topic

And as mentioned above, content created from these different models can be edited and repackaged for distribution via other channels.

THE "EDUTAINMENT" APPROACH

For the edutainment approach, there is a large body of research showing a causal relationship between radio and behavior change in the areas of healthcare, and there is some evidence supporting impact of radio programming on changes in financial habits. See the appendix for examples and supporting research. **Generating an emotional connection with characters is a critical part of generating audience engagement and motivating behavior changes**.

For entrepreneurship, there is some evidence that the edutainment approach can be used to:

- Change gender norms
- Create aspirational models
- Encourage specific financial behaviors, e.g. saving money or avoiding risky investments

The TechnoServe Women in Business program is an exciting program using edutainment as a part of its market systems development program to train and empower women entrepreneurs in Mozambique.

Women in Business (WIN)

The WIN program in Mozambique is a five year program working to economically empower women in Mozambique by facilitating the development of market solutions for low income, entrepreneurial women, in partnership with the public and private sector.

WIN uses media as a channel through which to transform at scale how women are presented and perceived, hoping to impact social and household-level expectations that frame what women can achieve. The radio program is a "novela" or radio drama about an urban entrepreneur and was developed based on the experience of the WIN team and their production house with other radio programs. The show will be available through both radio and interactive voice response channels, and the WIN team expects to reach roughly 500,000 women in Mozambique.

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WIN partnered with a local Mozambican production house who is doing all of the content. The WIN team determined the key entrepreneurial and gender messages that they wanted to communicate. The production house is creating 26 15-minute episodes that will be delivered in long form (i.e. the full 15 minute program) over radio, with a short form three minute "mini" version that will be delivered via IVR.

The TechnoServe Strategic Initiatives and WIN team built a plan to:

- clearly indicate broad overarching themes that should be addressed throughout the series
- identify core entrepreneurship messages to emphasize in the series
- list a series of secondary content and messages that could be sprinkled within the plotline, time permitting
- guide character and plot development in the radio drama

Because it is almost impossible to reduce several hours of skills training - whether in-person or remote - to a short series of radio dramas, the purpose was not to emphasize training on specific entrepreneurship skills, but rather to focus on changing social norms or to create an image of personal/business skills that listeners can emulate or aspire to, and to create a relatable, emotional connection to the storyline.

The TechnoServe team did **not** map the series timeline directly to the training plan for the WIN program. Instead, the radio drama series was designed to promote female empowerment and reinforce core entrepreneurship messages and themes while offering an entertaining storyline

The production house was responsible for fleshing out the characters and creating the storyline. The appendix includes a summary of the first five episodes, which set up the story and highlight some of the key educational themes.

Radio for Training Smallholder Coffee Farmers - Nespresso Ethiopia

In Ethiopia, TechnoServe partners with Nespresso to deliver agronomy and business training to coffee farmers. Radio is widely accessible to farmers throughout Ethiopia. Between December and February in 2016 and 2017, TechnoServe used radio broadcasts in the Sidama region of Ethiopia. The program used 4 types radio broadcasts:

1. Radio Drama (10 Minutes long) – twice per week for one week
2. Question and Answer Contest (15 Minutes) – twice per week for two weeks
3. Interview with Model farmer (10 Minutes) – twice per week for two weeks
4. Advertisement to promote TechnoServe agronomy training (1 Minute) – twice per day for two months

Coffee agronomy best practices require precise techniques that are best delivered in-person. As such, the intention of the radio programming was not to teach the techniques of the best practices, but to (1) explain the rationale for practices that might be new to farmers, (2) reinforce key learnings taught during in-person training and (3) increase awareness for TechnoServe training.

For example, the radio drama focused on coffee stumping, a critical agronomy practice to rejuvenate old coffee trees, that has been shown to increase farmers' coffee yields by ~50%. The radio programming explained the benefit of stumping and the training TechnoServe provides on stumping itself and how to mitigate its cash flow

impact via a dramatized conversation between coffee farmer who stumped his trees for the first time, his family who did not understand why he did this, neighboring farmers who had also stumped their trees and a TechnoServe farmer trainer.

TechnoServe partnered with FANA FM radio, an Ethiopian radio company, who was responsible for developing the scripts and materials for the programming in the local language (Amharic) and broadcasting the programs by leasing airtime on a local radio station in Sidama. While TechnoServe and Nespresso also provided farmer training in the West Guji region of Ethiopia, the team did not pursue radio broadcasting in this region. Reaching farmers through radio in West Guji would be more difficult, as farmers listened to many different radio stations, whereas in Sidama, there was one main radio station farmers used.

The program was unable to conduct an impact assessment of the radio programming on farmer learning or behavior change. Going forward the team is interested in exploring radio further.

At this point for smallholder farmers there is limited **academic** research showing a relationship between edutainment, practice adoption, and income increases. However, our experience is growing with different forms of radio entertainment, and TechnoServe work to-date suggests a positive effect of radio on learning for farmers that merits further M&E impact quantification for these programs.

PUBLIC SERVICE ANNOUNCEMENTS (PSAS)

PSA's are generally used to create awareness, but can also be part of a conversion/capture plan, and to generate advocacy, as the Ethiopia ATA Farmer Hotline project demonstrates. PSA's have been used effectively to drive participation with other services, such as using SMS and call-in resources on a specific topic.

Ethiopia ATA 8028 Farmer Hotline Project

The Ethiopia Agricultural Transformation Agency (ATA) 8028 Farmer Hotline project is a good example of how radio can be used to generate **awareness/consideration** in the User Engagement Journey, and how **conversion/capture** can work with a radio campaign. Finally, the ATA is a prime example of using radio to create **advocacy**.

The ATA recognized that 1) farmers were unfamiliar with IVR and text technology and 2) farmers did not readily trust "free" services provided by the government. Therefore the ATA used radio ads as well as dramas, coupled with distributed printed materials, to create buzz and generate interest in the new platform. The radio promotions generated a spike in calls, but did not lead to sustained demand for the service. However, radio promotions in combination with other campaigns were an important part of their effort to increase trust in the service.

For **conversion/capture** of new users of the service, they advertised a number where users could call in to register. The registration process was simplified to request only basic contact info so that the service can broadcast info to them about weather, diseases, pests, and good agronomic practices.

Perhaps most importantly, the ATA radio campaign drove **advocacy,** helping them build a network of brand ambassadors and advocates, who were critical in driving adoption.

For the ATA, radio formed part of a multi-tiered marketing program. More detail about our interview with the ATA is included in the appendix.

PRE-RECORDED CALL-IN SHOWS

"Long format" shows are generally used to deliver content to loyal users who want to "lean-in" to indepth content. Long format content can be re-packaged for other media, as the BeninCaju program did with content for their radio/phone campaign.

High Margin Agriculture - BeninCaju

Study Background

The BeninCaju program implemented a pilot program to test the effectiveness of radio and telephone messages to communicate agricultural best practices and access to financial resources. This initiative was a joint strategy in partnership with the national cashew producers union (FENAPAB). BeninCaju's field training staff (CRS), jointly with FENAPAB, selected the key messages that they observed needed reinforcement that would be delivered at the appropriate time during the agricultural calendar.

The ProRadio program was piloted between August and December 2019 with nine radio stations across Benin, and they ran a follow up series in March and April 2020. The radio coverage area was approximately 67,000 farmers. In addition, with the iBPA-Mobil program, more than 5000 farmers received audio messages on their phones regarding how and when to implement specific agricultural practices. The radio and telephone campaign was timed with the agricultural calendar so that it would be immediately relevant to the listeners.

The study was designed such that all farmers receiving the phone messages would also be within the zone covered by the radio programming so that they could measure the impact of radio and telephone individually and in combination. Messages 1-2 minutes long were delivered in five different languages: French, Fon, Nagot, Bariba, and Lokpa. Upon answering the phone, the farmer would listen to a message and then enter their satisfaction level. They would be given an opportunity to make a paid call to a customer support center to ask specific follow up questions.

Radio programs were pre-recorded panel discussions on specific topics related to cashew agriculture best practices. Journalists had a list of scripted questions, and farmers and technicians in the studio responded to the questions during recording. They also ran shorter public service announcement style messages, or "micro programs", on four different topic areas: 1) the importance of beekeeping (apiculture) for cashew plantations, 2) management of cashew plantations, 3) disease and pest management, and 4) importance and operation of cashew cooperatives. All of the content, both for radio and the phone messages, was produced locally in Benin.

The messages on the radio were not exactly identical to the mobile micro-programs. The mobile messages were short and direct and focused on one specific activity, e.g. how to build a firewall around the field to avoid cashew trees from burning during the dry season.

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Program Objectives

Program objectives were the following:
- Measure impact of radio programming in the zones covered by the nine radio stations
- To estimate the number of beneficiaries reached
- To evaluate whether beneficiaries found the messages convincing, and whether they were likely to adopt practices promoted in the programs
- To analyze radio versus other social media, such as Facebook, Youtube, Instagram, etc.
- To make recommendations about how to improve the program in the future to improve impact

Program Results

In general, the program found that the ProRadio program was an effective way to ensure equitable access to information on best agricultural practices, without needing an artificial cutoff for beneficiary training participation, e.g. the requirement that farmers have at least one hectare of cashew under cultivation.

Some of the key findings about the ProRadio program include:
- 81% of farmers followed the cashew broadcasts. 68% listened to the programs with their families.
- The best time for radio programming is 1900-2200 (7-10pm).
- 80% of farmers discussed the content with peer after listening to the programming.
- 76% of farmers felt that information in the broadcasts would help them increase their revenues; 96% were convinced of the advice in the broadcasts, and 92% had already put some of the practices into action.
- 76% of respondents stated that radio broadcasts were preferred over other types of broadcasts, including entertainment, music, sports, health, politics and other topics.
- 90% of respondents had "good" or "very good" comprehension of the broadcasts.

There was a sense that the broadcasts created a sense of excitement about cashew and a tacit spirit of competition, preparing farmers to adopt best practices.

For the iBPA Mobile program, they found that 70% of farmers kept their phones in their pockets while working in the fields. Only 25% of farmers can participate in cashew training meetings, and COVID 19 has made in-person more difficult, so the phone is a logical way to connect with them.

However, out of 9000 messages sent, only 34% of farmers received the messages. Reasons for this include: 1) timing of sending the messages was inconvenient, and delivery of some messages was delayed; 2) no creation of awareness about the campaign beforehand, and reluctance to answer their phone because of a local Beninese social media hoax; and 3) the text to reply for follow up was in French. Nonetheless, over 80% of farmers receiving the calls felt that they were convincing, and discussed them with their peers. Only 292 persons replied with a follow up call to request additional best practices information - it is believed that this was because it was a paid call.

Looking at the radio and phone calling program relative to other networks, the program noted that less than 10% of farmers in the region had a smartphone. However, for the small and growing segment of the population

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with a smartphone, it would be possible to re-package the microprogram content at minimal cost. Smartphone owners could then share the content with their peers.

The BeninCaju program is preparing a full evaluation report that will be available in late 2020.

TechnoServe Coffee - CAFE program

The CAFE program started delivering training curriculum to coffee farmers in Peru due to travel restrictions as a result of COVID-19. The program broadcasts monthly pre-recorded radio shows covering critical coffee agronomy best practices. The radio content was delivered in tandem with several other remote learning tools e.g., video tutorials and a call center where farmers could call in to ask questions about training topics.

Before launching the radio show, the program conducted a survey to determine what channels farmers use to acquire information. The program team called farmers from a database of approximately 1000 farmers. For the ~57% of farmers who answered the call, the program team walked through a scripted set of survey questions inquiring about all the channels farmers used to get information, the primary channel they used, the economic state of their farming enterprises (given the economic challenges of COVID-19), among other topics. The survey indicated that when it came to choosing a single channel to acquire information, ~85% of farmers turned to radio. After deciding to use radio to deliver training content, the team conducted another survey to validate the length and timing to best broadcast. They found that farmers would not listen for longer than several minutes, and that most farmers would listen between 5-7 in the evening.

The radio program consists of roughly ~1000 monthly broadcasts on ~2-3 agronomy topics (e.g., pruning, tissue tissue management) delivered at the time of the coffee season during which practices should be implemented, as well as critical business topics (e.g., gender inclusiveness, income diversification). Each topic ran no longer than ~1-2 minutes. The content was produced locally: the CAFE program adapted the Coffee Farm College curriculum into these pre-recorded shows.

The team is currently preparing a survey to assess the reach and efficacy of the radio programming. Current estimates indicate that ~65% of target beneficiaries hear the radio show. In the upcoming survey, the team will assess: the number of farmers who hear the programming (reach), whether or not farmers find it useful, and other feedback on important considerations like timing and duration.

LIVE CALL-IN SHOWS

Live shows are typically used to deliver content such as overviews of best practices and to answer specific questions that farmers have. They are often staffed by individuals with an agronomy background, who are comfortable giving specific, detailed responses to questions.

High Margin Agriculture - Yieldwise Program

In Nigeria, TechnoServe operates the YieldWise program to reduce post-harvest loss for tomato farmers. Since September 2018, the program has run three radio series in the Kano state of Nigeria. The radio program, called "Tomato Deriba" is used to share market linkage opportunities, reinforce agronomy best practices taught to farmers through in-person training, and answer specific questions farmers can call in to ask. Radio was implemented alongside other distance learning tools - including one-way bulk SMS and toll-free IVR

- after the Yieldwise program ran a needs assessment to determine how best to reach farmers. The program team found that farmers in the Kano State widely accepted what they heard via radio to be true.

Each series consisted of about fifteen to twenty 30-minute episodes that run over a five month time period, airing first on Wednesdays from 8:30-9:00 pm in the evening and replaying Saturdays at 6:30 am in the morning. The broadcast was run by a coalition of stakeholders with expertise in each topic (e.g.,university professors and TechnoServe staff to share best practices on market linkage and to walk through step-by-step instructions on agronomy best practice to reduce post harvest losses).

TechnoServe partnered with Farm Radio International to roll out the broadcasting. Farm Radio International supported TechnoServe to run the navigate the radio landscape, set up the toll-free line and tracking software used for farmers to call in (i.e. Uliza) and conducted a midterm evaluation on the reach and impact of the radio programming on farmers' knowledge about improved practices to mitigate post-harvest loss and improve post-harvest management and on farmers' use of improved practices in these areas.

In the midterm evaluation (which should be noted is very well done and is attached as an appendix) Farm Radio International found high reach and notable impact of the radio programming on farmer knowledge and best practice adoption:

Reach: The total number of listeners was estimated at 1.4 million. Of the ~380 respondents surveyed, 92% heard the radio programming, and three-quarters listened to half or more of the episodes aired. The program saw notable *advocacy* as well: over 2 in 5 listeners talked to others about the topics of the radio program. In terms of gender, radio was shown to be an effective way to reach women: 99% of women respondents listened to the program (compared to 85% of male respondents).

Knowledge: The study suggested that radio potentially contributed to increasing knowledge of production and post-harvest management, and of marketing. The study assessed respondents' knowledge by asking twelve questions on tomato production and marketing to listeners (~340 respondents) and non-listeners (30 respondents). Listeners' knowledge scores were higher than non-listeners for seven of the twelve questions, in the areas of harvesting, sun drying, and marketing tomatoes. See the Appendix for more detail.

Best Practice Adoption: The study also suggested that Tomato Deriba potentially contributed to increased uptake of various practices to reduce post-harvest loss of tomatoes, including treatment of seed with pesticides before planting, proper drying practices, and use sorting and grading techniques. Finally, the assessment also indicated positive impact of the radio program on promoting financial management and marketing. Compared to non-listeners, listeners were more likely to keep records and use financial services, join co-operatives and use commercialization practices like staggering production and aggregating volumes to sell.

Summary

Radio can be an effective component of a remote and blended learning strategy to reach users without access to a smartphone - in what TechnoServe defines as User Profiles 0, 1 and 2.

To implement an effective learning program that uses radio, consider using the User Engagement Journey model as a framework. As with all remote and blended learning programs, build a program with high levels of engagement by integrating radio with other tools (see the Farm Radio International and Ethiopia 8028 program examples) to make it interactive. Plan programs to be able to re-use audio content in multiple different formats (long-form, short-form, PSA) and distribution channels (e.g. radio, WhatsApp voice-note, IVR), building a media "content constellation" for your program.

Most importantly, content needs to be entertaining and relevant for the audience, and the audience should see themselves reflected in the content. No matter how well-designed and well-intentioned the program, if the content is not interesting and entertaining - people won't listen, and they won't learn.

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Appendices

APPENDIX 1: LITERATURE REVIEWS

KENYA - Radio and television dramas for farmer education

- [The Mediae Company](#), which produces media for social education, created radio drama [Makutano Junction](#), which ran for ten years and later became a television show. The [Makutano Junction case study](#) includes useful practical guidelines on the script development process.
- The Mediae business model is to "meet audiences' information needs and deliver information in an appealing way [while] building big audiences and attracting both donors and commercial sponsorship with which to pay for production and transmission costs".
- Makutano Junction attracted 5.5M rural Kenyans at its peak.
- The radio program was integrated with an SMS text campaign. At the end of each show viewers could send a text message and receive a leaflet with information about an issue discussed in the show.
- Research on impact showed changes in viewer knowledge, attitude and – to some extent – practice. The research methodologies developed and used by Mediae over the course of the project do not actually prove change in behavior; rather they show reported change in behavior.

EGYPT - Evaluating the effectiveness of entrepreneurship edutainment

- A study published in 2017 on [Evaluating the Effects of Entrepreneurship Edutainment in Egypt](#) found that "television or radio programs can have crucial long-term impacts on societies, and, in particular, on gender-related norms"
- The "El Mashroua" show involved 13 episodes and 14 contestants, with each episode featuring a challenge to test entrepreneurial skills. Contestants were recruited from different sub-groups, and female contestants were top performers (trailer [here](#))
- Results: Female role models led to positive perceptions of female entrepreneurs, however it is unclear if the show caused an increase in viewer aspirations towards entrepreneurship
  - The impact was greatest on men and the least-educated viewers
  - "the impact of the show on individuals' gender-related opinions associated with self-employed women completely vanishes when a respondent is exposed to the show along with their friends"

SOUTH AFRICA - Television soap operas for personal financial awareness

- A [Study on South Africa Financial Education Soap Opera](#) by the World Bank in 2013 compares viewers of two soap operas: one with a financial education storyline, and one without
- The story featured a main character getting into debt, then finding a way out with the help of a debt counsellor from the National Debt Mediation Association (NDMA)
- Viewers who watched the storyline showed significantly better financial awareness and behavior
  - However, while calls to the NDMA spiked following episodes, they did not increase over the long term. The authors hypothesized that this is because the debt counsellor had a minor, temporary role on the show.
  - Viewers retained more of the storyline that directly involved the main character, suggesting emotional connections are extremely important.
- The storyline was tested on a focus group before being finalized

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- The storyline was part of 26 episodes and aired over 2 months, which was deemed a minimum period of time for viewers to connect emotionally.
- There was a greater increase in formal borrowing among male viewers.
- Other studies found mixed results. They study notes that USAID and Britain funded different soap operas promoting capitalism in the 1990s. USAID's project failed, while Britain's succeeded - likely due to better production quality of the British drama.

BRAZIL / AFRICA / INDIA / US - Soap operas as a tool to fight poverty

An article by the IGC, Fighting poverty with soap operas references several other studies:
- 2012 study in Brazil that found a relationship between soap operas and dramatically lower fertility rates.
- 2009 study in India found relationship between cable TV and lower rates of domestic violence
- 2014 study found that the MTV show "16 and Pregnant" led to a decline teen pregnancy in the US.
- 2009 studies in Rwanda showed a soap opera focused on reconciliation had effects on norms
- 2013 study in India found that a short movie about a migrant and a national antipoverty program increased awareness, but did not lead to behavior change

AFRICA - MTV Staying Alive Foundation - Shuga

- MTV Shuga is a soap opera focused on improving youth sexual and reproductive health by "fusing sexual-health messaging with gripping storylines"
- Series 3 of MTV Shuga has aired on 87 broadcasters worldwide, with a potential global reach of over 500 million viewers. It's been viewed in countries such as: Nigeria, Uganda, Ghana, Kenya, US, Australia, Canada, South Africa, UK, Zimbabwe, Iceland, Zambia and Qatar.
- Supported by the Bill and Melinda Gates Foundation and the The President's Emergency Plan For AIDS Relief (PEPFAR)
- Success of the African series led to development of a similar soap opera, "Nishedh", in India

PERU / SOUTH AFRICA / PAKISTAN - Soap operas as edutainment

An article in the Council on Foreign Relations: "Soap Operas as "Edutainment" gives examples of radio soap operas that have led to behaviour change:
- A 1969 Peruvian drama about a poor woman who moves to the city, learns to read, and starts a sewing business led to increases in enrollment in literacy classes
- Pakistan NGOs have used radio-based soap operas to reach rural women with social and health messages
- Saint Lucian and South African soap operas have led to adoption of healthier sexual behavior

Educational strategies for entertainment education campaigns

An outstanding article on "The Entertainment-Education Strategy in Communication Campaigns", published in 2001 but still very relevant, "summarizes lessons learned about the use of entertainment-education in communication campaigns dealing with family planning, gender equality, HIV prevention, and environmental conservation.

A few key highlights:

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- Before launching a campaign a "Moral Framework and Values Grid" should be created of specific education issues to be emphasized. Behaviors need to be specifically defined and consistent with government and cultural institutions.
- Role models used in education campaigns
  The highly successful entertainment-education soap operas in Mexico used three types of role models: (a) those who support the educational value (positive role models), (b) those who reject this value (negative role models), and (c) those who change from negative to positive behavior (transitional role models) during the soap opera's broadcasts
- The campaign should be one element in a multi-media campaign involving posters, print advertisements, other broadcast messages, telephone hotlines, etc. (And not mentioned, but social media would be used now….)
- Behavioral research is used before and during the campaign to create and modify messages based on efficacy.
- Media campaigns must be 1) popular and attract the highest possible prime-time audience, 2) very high quality, 3) win-win for government, media, private corporations, and donor groups - honoring commercial and social objectives.

The article also addresses ethical issues, and some potential unintended consequences of edutainment campaigns.

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APPENDIX 2: EXPERT INTERVIEWS

Former NPR Director

Interview with media executive - Former VP, Partnerships Strategy and Operations, Blackboard / Former Managing Director, National Public Radio
- In both of these roles, was heavily involved in leadership training and can elaborate on how to translate training to paper materials and how to best teach immediate independency through trainings
- At NPR, she led various kinds of trainings using different mediums and had experience with best practices for trainings for social change leadership and entrepreneurship
- Understands managing, onboarding, and product adoption portion of training and best practices for remote, limited technology settings

Notes from the call
- Radio is a powerful and multi-sensory medium (incorporates sound, music, cadence, etc.); use the full spectrum of audio content
- "Education" is highly effective for influencing perception, and ***repeating*** concepts drives habit change
- Think of the show as part of a broader brand strategy
  - Imagine yourselves as a brand or media company
  - You need talent, producers and creators.
  - Build franchises around the main personalities -- people form strong connections to aspirational figures. Need brand ambassadors - develop personalities!!!! Build brand awareness around the person; you need the commentators that represent the aspiration of the industry
  - Develop a campaign to drive awareness of the show/training and get people to tune-in; build "aha's"
  - Integrate with social media
- The right format for a radio show depends on a users' current place on the engagement journey:
    1. Awareness: They are exposed to your content
    2. Conversion: They decide to learn more
    3. Engagement: They are "hooked". This is where behavior change happens. Q&A is for people who already care. Panel is "lean-in content"; you are already bought in to the process and want to learn more. People already interested. To get people to sit through 15min of a listening piece, they *really, really* want to learn about it
    4. Loyalty: They come back for more content
    5. Advocacy: They spread to others
  - A technical video on coffee farming will only attract people who already care about it. Could be appropriate at the "engagement' stage, but not "awareness" stage.
- Repackage content
  - Use a "content constellation" to pull different user types in.
    - For example, if you have a 15 minute training video, take the best 3 minutes and repackage for social media and "promote the heck out of it". Cut it up and distribute it across all channels. Create brand awareness and drive traffic to longer video.
    - Take a written script, produce it, then slice it up into other components.
- "What is old is new again"
  - There is a difference between broadcast radio - linear - and on-demand.

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- Long form, and short form, on demand
- Streaming - broadcast and then have a device to pick up the signals
- Can be used in group and individual settings
- Can be used in conjunction with other technologies
- Training could be a "show"
- User context is important to consider
    - Different formats depending on whether it is a linear broadcast or on-demand
    - Important to consider the user environment when developing content (e.g., are they alone? In a communal setting? At work?)
    - What device do they use? For example, a web enabled phone would allow picking up long and short form on-demand signals
- Leveraging voices
    - Needs to be relevant to their own context and local; connecting to people so that they can see pieces of themselves reflected in the story
    - Can be voices that have been part of other programs - build showcase stars that have been in other media
    - Success stories are very relatable. Why do half of kids in America want to be a basketball player, movie star
    - People follow proven trails, instead of blazing their own trail
    - Creates relevancy for listeners - you can do this too! Tune in at this time and you can learn how
- Schedule
    - Radio is very schedule-based; the user schedule will determine either the program schedule (for radio) or how the content is programmed (e.g. for a podcast of other media)
    - Make it episodic - known times of day when they will listen
    - Build it around rhythm of the village or community; depends on how they have access the radio - may be in the workplace or on while working
    - If using radio, need to consider what time of day people will listen
    - (Dave note - also need to consider the type of channel and reach of the radio station being considered. Example from MOCCA program discussion.)
- Examples for inspiration:
    - Successful podcast companies & traditional radio powerhouses (NPR, BBC, Disney, Spotify, Gimlet, Pineapple)
    - Look inside ed technology sector with **marriage of narrative with programmatic content**

Program Manager for Ethiopia ATA

We interviewed Elias Nure, Program Manager for the "8028" Farmer Hotline for the Ethiopia Agricultural Transformation Agency. While this was a hotline program, they used radio as one means to promote the program.

The 8028 progra is an IVR/SMS messaging service, allowing users to opt-in to receive a message broadcast and allowing surveys of farmers and extension workers asking simple questions - Do you see a disease? What type of disease? This info is then used to target training and follow-on outreach.

As of 2020, they had 5M registered users, and 43M calls into the system.

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Despite the fact that the 8028 Farmer Hotline was based on mature IVR/SMS technology, Ethiopian extension agents and farmers are still not used to it. Farmers don't know how to use menus and help desks in the service. As a result, they had to promote the hotline heavily, using:

- Presentations to high schools
- Field promotion teams
- Promotions to heads of household
- Radio ads
- Dramas
- Promotions with champions and thought leaders in the field
- Radio

Elias was even planning to set up a Genius Bar in rural telecom offices where people can walk in and get trained.

They rolled out the service initially by doing small pilots in some regions for basic horticulture, then they added crop types, and scaled to more regions. The initial pilot involved 7,000 users, and generated 60,000 calls into the systems. All of this was generated via word of mouth advertising. For the initial pilot and for scaling of the system, they had to overcome skepticism about offering a publicly available, free service. Users heard lots of rumors and myths about how their data might be used, and in Ethiopia people generally do not trust the telecom operators.

ATA use of Radio

Radio was a core part of socializing users to the service. This corresponds to the *awareness/consideration* phase of the User Engagement Journey framework - bolstering the ATA 8028 Farmer Hotline brand, creating buzz about the platform, and generating interest. After the initial pilot, ATA hired a communication firm to promote the hotline, and at this point they started using radio ads and dramas, coupled with distributed printed materials.

With the ads, they saw a spike in calls, but this was a one time spike and did not result in continued usage. However, some users began acting as champions for the service within their communities. The ATA noticed that some people who called 30-40x were doing demos - showing others in the field how to use it and calling on their behalf. These are the influencers, who are critical - people trust individuals they know, and not the government.

Based on this learning, they started doing radio dramas as a part of a multi-tiered marketing program that included building brand ambassadors, doing road shows and other forms of community outreach. Radio is costly and not very dynamic or interactive, but was helpful to build their brand and generate interest with influencers,

Converting Radio Listeners

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To *convert/capture* users (again to use our User Engagement Journey framework), they built a simple help desk where users who heard about the service could leave a voicemail that would be forwarded to an expert who could then respond to the user issue. When users call in, they are asked to register and provide basic contact info so that the service can broadcast info to them about weather, diseases, pests, and good agronomic practices.

ATA spends approximately $0.30 to convert a farmer to call to the 8028 service. To measure conversion, they monitor monthly statistics including the increase in callers. It takes roughly three calls until users trust the content. They decreased this by making it easier to register (this is a nudge - decision architecture in behavioral economics). However in doing this they lose some of the user profile information previously retrieved in the registration process.

Synchronizing Content Across Channels

Within their content programming, messaging is synchronized across media types, but this is not deliberate - it is more a function of all media channels coordinating their messages with the harvest cycle. They use a government program curriculum, and ATA and other partners share common messaging.

WIN Radio - Show Episode Summary

Below is the summary of the first five episodes of the WIN program's edutainment radio show. It follows the story of a relatable woman named Janete who opens a restaurant in a new market to help pay for her daughter's university fees. Over the course of 26 episodes, she overcomes many challenges (including a pandemic that shuts down the market!) and grows into a confident businesswoman. Each episode was designed to entertain listeners and reinforce key themes, which are in italics next to the titles.

EPISODE 1 - THE NEW MARKET *Financial education + Record-keeping*
JANETE presents herself and the key members of her family. "Hi, my name is Janete... This is my daughter... This is my husband... and today is my first day in my new workplace." She tells us why she opened this business and gives her personal backstory and motivations. It's almost opening day. JANETE gets to know her new workspace and colleagues at the New Municipal Market. We get to know more about her backstory while she gets acquainted with her colleague ELSA. The head of the market MR. FRAGOSO welcomes everyone and presents the rules and conditions of the market. JANETE is confused about the rates, which were not what she had anticipated, but ELSA, who already has more experience, helps her to overcome these initial difficulties. During this episode we get a good look into the main characters and their motivations.

EPISODE 2 - MONEY MISSING *Record-keeping + Customer service*
JANETE loves it when ANA, a recurring client, comes to her restaurant. Besides being very chatty, she always gives tips on how customers like to be served and about products that are popular among her friends. She ends up taking a lot of JANETE's time while other clients keep coming and going. When JANETE closes the restaurant for the day, she realizes something is wrong. She sold all of her soup and many meals, but has so little money. ELSA teaches her how to make a detailed record of the day's sales. JANETE creatively develops her own system to prevent the situation from repeating itself.

EPISODE 3 - SAVING FOR A RAINY DAY *Record-keeping + Savings*
MARISA'S Theatre Group, which supports women entrepreneurs, comes to the market to perform a play about the importance of savings. JANETE and ELSA listen carefully and talk to her about their difficulties. MARISA offers some solutions to help them calculate their profit and implement a savings plan, giving them a challenge for the upcoming week. MARISA promises to be back to find out how it went. JANETE and ELSA feel really motivated to get it right and impress the activist.

EPISODE 4 - THE HUSBAND *Gender Roles + Personal Effectiveness*
JANETE comes home after work and tells her daughter TINA how the day went while she prepares dinner. ESTEVÃO, her husband, enters the house and, seeing that dinner is not yet ready, starts an argument, putting the blame on her new job. JANETE shows him how well the restaurant is doing and how the household will benefit. After calming down, he ends up acknowledging this but states that she cannot neglect her responsibilities at home. JANETE reflects on the challenges ahead.

EPISODE 5 - I'VE GOT A BRAND *Marketing and Entrepreneurship*
TINA goes to the market to offer a symbolic good luck gift for her mother's restaurant, an apron with her name embroidered on the front. JANETE is complimented by a client and she sees it as an opportunity to create her

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brand. She asks her daughter to make one for Elsa as well. This gesture later creates envy and complications in the market, especially with MARIETA, who owns a similar establishment on the other side of the market. But when customers start to ask for JANETE's restaurant and the business grows everyone will see it was a good investment after all.

Yieldwise - Radio's Impact on Knowledge and Best Practice Adoption

Here is a link to the complete midline survey conducted by Farm Radio International in November 2019 - "Reducing Post-Harvest Loss Through Social and Behavioural Change Communication".

Nespresso Ethiopia Radio Programming for Coffee Agronomy Best Practices

This folder includes the concept note, Q&A program format, advertisement, and radio drama script for the this radio programming conducted in the Sidama region.

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