



Foroba Blon

Voice-based Citizen Journalism



Trimester Report 3 to IPI

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EXECUTIVE SUMMARY

This is the third trimester report of the Voice-based Citizen Journalism project (Foroba Blon) funded by IPI. It covers the period July - September 2012. In line with the project plan, the work of *WP4-Platform deployment and Mali field pilot* and *WP5- Field training of journalists* was completed. In addition to the above work packages we also identified components under *WP6- Field Pilot Wrap-up, Platform v2 gathering requirements* to revise and improve the voice news platform application. This third trimester report covers the deployment phase of the Foroba Blon application and the training, feedback and additional field inputs received from the correspondents and radio stations.

One of the main deliverables of this project was the development of a citizen-journalism application based on voice-interaction. The goal was to set up a multi-channel system that included an interactive voice response system, which the non-literate listeners could call in order to send reports to a radio station and a web based system for radio stations in order to listen to those messages, moderate them leading to broadcast.

Starting in the last week of July and continuing till the first week of August the project team undertook a field trip to Mali to deploy and gather feedback on the Foroba Blon application. We covered 4 rural radio stations in addition to interacting with a popular local blogger as the end users of the platform. It was important to test, whether radio staff or citizen journalists, who are usually not familiar with such simple yet untested technology based systems could make it work for their intended use, derive value, and trust it. The primary objective of the trip was to demonstrate the application developed, train the users both on the correspondent side and the radio side and conduct usability testing. Valuable feedback was generated during this exercise that is now being fed back into the system as discussed in the following chapters.

The last phase of the project entails refinement of the platform and reporting key outputs during the project lifecycle that we plan to report at the end of November.

BACKGROUND: - VOICE BASED APPLICATIONS DEVELOPED UNDER FOROBA BLON

Problem Statement: Owing to the fact that people in rural regions don't usually have access to computers or mobile internet access, they get their share of news and local events from the local community radios. These radios are woven deep into the social fabric of such communities. However these radios find it difficult to communicate with listeners or reporters, and can miss important stories. Foroba Blon seeks to address this issue by linking the community radios and citizen reporters by a simple to use voice technology to exchange and broadcast such locally relevant information.

According to the project plan, the work of WP2 - platform and pilot requirements, was finished and reported in the first trimester. In February 2012, the project team conducted a field trip to Mali and interacted with three rural radio stations selected as pilot deployment site, leading up to the technical requirements and design of the radio platform. This was reported in the second trimester report.

Over the last five months, stretching till July, Foroba Blon services were developed according to the requirements analysis. Starting July 27 till 6th August, the project team conducted a field trip to deploy, test and gather feedback to further work towards a full scale deployment of Foroba Blon. This report covers the primary outcomes and key takeaways of the deployment stage.

In February through discussion with the radio staff, we explored and identified three possible uses of the voice based application. These included:-

1. **Citizen-journalism:** The proposed use case where trained correspondents can use the system to leave reports. The radio station can retrieve messages, delete them or broadcast them.
2. **Letters to the editor:** Similar as the previous one but with a more local flavour where people can react to the show being broadcast by leaving messages, opinions, requests to the radio stations.
3. **Linking Diaspora via the web:** A web interface enabling diaspora to leave messages for the community radio stations.

We also observed how commercial messages were being utilized by the community radio stations. In their existing form citizens residing in remote locations would pay to broadcast their messages with the entire value chain being in the manual form, e.g. a local radio correspondent would collect such pieces of broadcast on paper, collect the money for the same and physically bring these to the radio stations for subsequent broadcast. We also explored the idea about linking various advertisers' to the system to record their announcement themselves, as opposed to the traditional way of sending text to be read by the radio presenter while on air.

As part of the development cycle we interacted remotely with implementation partners- Sahel Eco, Radio Segou, Radio Moutian- to continuously refine the use cases identified above and arrived at the final set of services to be deployed and tested during the implementation phase in July.

The radio platform we developed is designed to cater to all of the above scenarios, but in order to focus on the main deliverables of this project; we limited the pilot deployment on the citizen-journalism applications for citizens and radio stations.

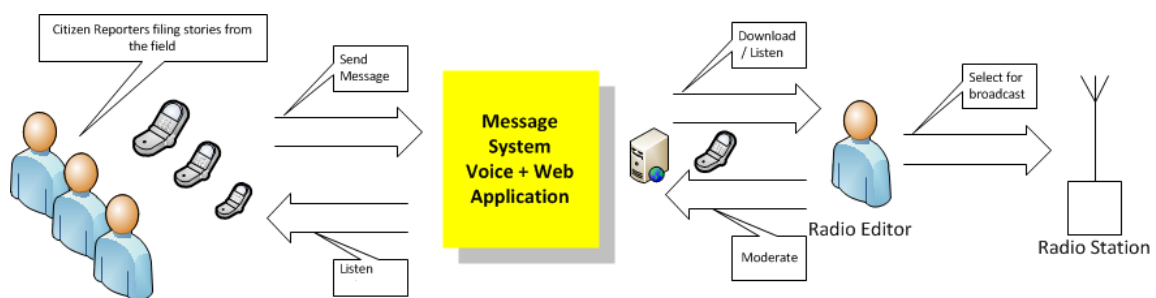
THE RADIO PLATFORM FOR DEPLOYMENT

This aspect was described extensively in the second trimester report. However it is important to put in context what we developed deployed & tested in the field to better absorb the key takeaways elaborated in this report.

Feature(s) of the radio platform

Voice based service for community radios to gather news or listeners' reactions as submitted by mobile phones. It does so by facilitating incoming communication with remote correspondent's submitting information via their mobile phones.

Functionalities of the Radio Platform



Foroba Blon: actor and processes

For the correspondents / journalists:

The journalists are attached to a specific radio station (while the system itself can manage multiple radios at the same time). To access the voice platform they can call a local Malian phone number and interact with a vocal IVR application. Functionality offered to correspondents is available through menu driven simple speech interaction in French and Bambara. In terms of functionality the correspondents can call the system and leave news stories, reactions or anything they wish to communicate to the radio and other listeners. They can also call back and listen & manage the messages stored previously.

For the Radio Stations:

Management: The messages sent to the radio station are stored on the platform and anyone (preferably a person delegated for this task-Radio Editor) at the radio station can call the system by dialling a local Malian number / or use the web interface (most preferred if connectivity is available as discussed later in the report). Using the web interface the radio editor can (1) download (2) manage & edit and (3) broadcast the messages.

Other Features:-

- **Cloud Hosting:** The entire platform is hosted in the cloud; hence there is no physical deployment of any hardware infrastructure and linked services at the radio end or at the user end. The users can access the system using a simple mobile phone while the radio stations can access the IVR or via the web depending on their status of connectivity.
- Multiple Radios can be managed by the platform and each radio maintains its individual identity within the system, i.e. managing the messages sent to it by the respective correspondents.

Overall the entire system was designed using Web technology (LAMP and VoiceXML) and the application and its messages are stored on the Web. As the system is designed for contribution of content and not just distribution, it can easily be adapted to support new languages and read / write capability.

It was important to test, whether radio staff or citizen journalists, who are usually not familiar with such simple yet untested system could make it work for their intended use, derive value, and trust it. The field trip in Mali was primarily entrusted with the task of usability testing as discussed in the following chapter.

DEPLOYMENT FEEDBACK & OUTCOMES

Summary of the Field Trip

As mentioned in the previous chapters Foroba Blon suite of voice based services is a tool for community radios to gather news submitted by mobile phones. In its deployed state the platform is accessed by calling a local phone number and interacting with an IVR menu.

As part of the citizen's interface the community correspondents can call the system and leave stories, local news, opinion linked to programs broadcast by rural radio stations, or any other piece of information they want to share with radio listeners. These voice messages are captured and stored on the platform. Subsequently the radio stations can call the system, manage the messages and broadcast the same after due processing and as per the editorial practises of the radio stations.

The primary aim of this field trip was to test the correspondent's interaction with the Foroba Blon voice application as well as testing the radio interface with the community radio stations.



We started our campaign with a quick introductory first stop at Radio Sikidolo (translates into radio North Star). It presented an interesting case because it has a dedicated base of citizen journalists already engaged in collecting information and news items to be broadcast over the radio. The communiques and associated services like announcements etc. are paid for by people in remote villages and intermediaries collect these along with aggregated payments for the radio to broadcast. Foroba Blon services provide them the opportunity to cut down on this time lag and manual processing of news feeds.



Stephane from the project team demonstrated the correspondent and radio interface to the chief correspondent of the radio station. During discussions we came to know that Sikidolo has its own way on engaging and training their pool of citizen reporters. They have rural correspondent's that act as story gathering agents and also have the mandate to find new paid members for the radio stations.

Status: As this was a new radio station added from the list we had in February, we are currently engaged in discussions with them and estimating their initial training needs for a full scale deployment. It was heartening to note that this requirement came from the radio itself on one simple demonstration, strengthening our long held view that this was indeed a service that would not only benefit the community but also encourage community radios to adopt and deploy voice based services.



Our next stop was Radio ORTM Segou. We have been collaborating with ORTM Segou for the Radio Marche project and hence it was easy to test the waters linked to our new citizen journalism application¹ with Fousseyni Diarra. Stephane gave a demo of the

¹ you can play with a demo here <https://demo.webfoundation.org/radiomali/web/about.php>

voice based application to 3 citizen journalists linked with Radio Segou - Adam Coulibaly, Siaka Adama-Massala and Karim Coulibaly.



Initially all of them took few re-runs of the menu prompts to fully absorb the system, but once they were able to understand the call flow it was easy for them to subsequently use the system. Their initial difficulty in navigating the slightly complex menu gave us a novel idea- to develop a small colour coded menu card in French and Bambara that would allow them to intuitively understand the various menu prompts and the linked services. The citizen reporters were very happy at the prospect of being able to listen in on voice feeds provided by their colleagues from other villages

We quickly developed this card and used it extensively for all our subsequent demonstrations with other rural radio stations, (including a follow up trip to Radio Sikidolo)².



² Also discussed in detail in key takeaways

Our next stop was an all-day demonstration and feedback meeting with Radio Moutian and a group of 5 citizen journalists associated with the radio. Much like Radio Segou and Sikidolo it was easy for the citizen reporters to understand the flow of the application now aided by the colour coded flowchart.

They gave insights on what sort of information was in demand by the villagers – e.g. interest in collecting rainfall data, posing questions to local politicians over radio, a range of personal announcements like searching for lost cattle, health related questions etc. Radio Moutian also has a topic based call in program every Monday and Thursday where Foroba Blon applications find a natural fit.



We now proceeded to Radio Saniya, a relatively small and family run rural radio in Tominian. It catered to relatively well to do villages in terms of outreach and had relatively new and better radio broadcast equipment. Radio Saniya has a membership scheme that generates additional revenue for sustainability. This membership enables card holders to a defined number of communiques. The Foroba Blon application again was easily understood by the radio staff and they requested us to meet the director to bootstrap the deployment process instantly, which was quite encouraging.



We came across an interesting use case during our discussions with the Director General Mr Bandiougou Dante, which stands out as a utility for future development. Most of the development NGO's send audio tapes linked to their areas of work e.g. education, health, livelihoods etc. to these rural radio stations for broadcast. As there is no central voice based syndication service these tapes travel from region to region by hand for broadcast. Not only is this an expensive process, it also takes up lot of time thereby adversely impacting the intended use and delivery of important information. In subsequent iterations of this project we are contemplating including this use case for the rural radio stations.



Another remarkable finding of the field trip was the availability of mobile internet access by Orange and Malitel. The usb data access keys are readily available across most radio stations now and we realized the importance of providing individual web interfaces to the rural radios.

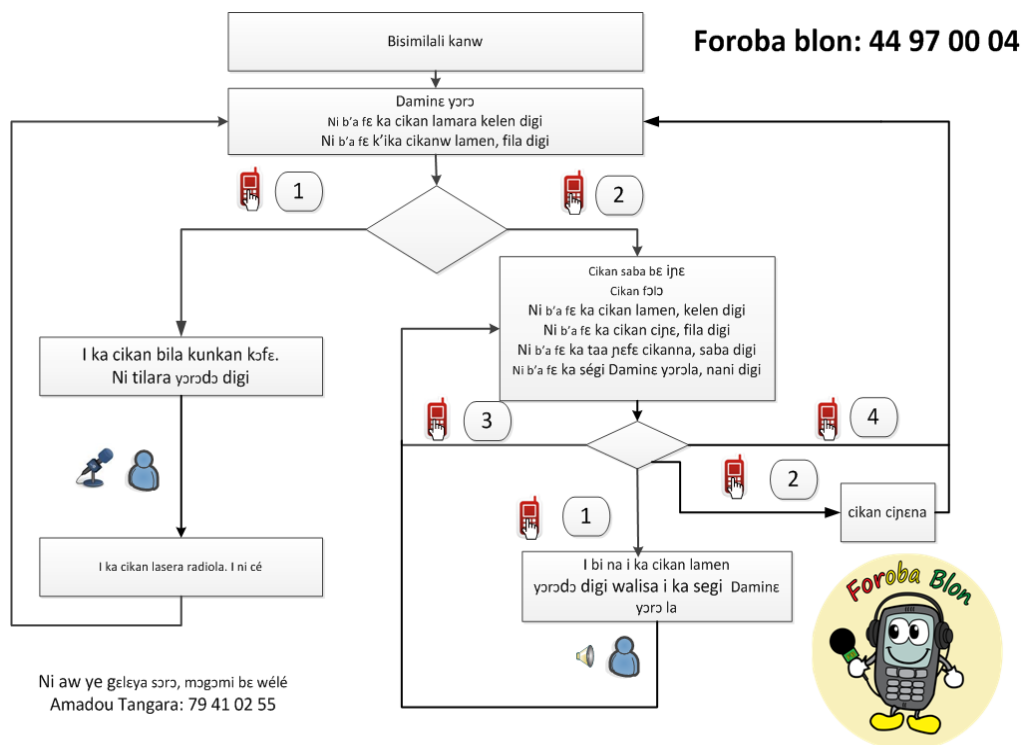
Key Takeaways & Outcomes

1. **Importance of Web interface for Community Radios:** We realized during our interaction with the community radio stations at Segou, Moutian, Saniya and Sikidolo that they had ready access to the internet using mobile access keys, either from Orange or Malitel. The affordability and availability of mobile internet is firmly established, (at least in these pilot areas) and the radio stations were of the unanimous view that it would be feasible for them to download the voice files using a web interface compared to direct broadcast via the mobile phones navigating the IVR menu.

Outcome: *This requirement was evaluated by the project team and the first version of radio specific websites is now up and we are in the phase of encouraging the use by the stations. The same can be found at <https://public.webfoundation.org/forobablon/en/home.php> (please refer to resources and links section for details)*

- 2. Visual representation of Call Flow & other usability aspects:** We observed early on during the field testing with Radio ORTM Segou that a visual representation of the call flow was the need of the hour to adequately train both the radio staff and the correspondents on the field. This visual aid was key in facilitating easy access by the first set of correspondents, and we realized that we could cut down subsequently on training time. Further this visual aid carried by them to their respective locations would further enable new correspondents to understand the call flow of the service easily in their own local language (French and Bambara in this case).

Outcome: We designed the call flow menu card in French and Bambara and distributed them liberally across the radio stations and correspondents. Snapshot of the call-flow is as below;



Correspondents referring to the call flow in Radio Moutian

Summary of other changes linked to usability as below;

Changes made to the voice application

1. Based on user feedback after recording of report, removed option to listen again and confirm. Save recording directly and go back to main menu.
2. When playing recordings received from the correspondents, added time and date and number of message
3. Removed "broadcast report" option for the radio stations as per their feedback.
4. Prompt changes (both French and Bambara):
 - * changed "citizen journalist application" to "Foroba Blon"
 - * "manage messages" changed to "listen to messages"For ease of understanding of the menu
5. Added the possibility to go back to top menu (to select Foroba Blon or Radio Marché) in order to provide a single unified customer experience to the voice platform.
6. Corrected inputs for various error messages missing in the tested application.

Outcome: For small number of people the visual card is a good tool for training. However as the radio stations and correspondents scale, this becomes a limiting factor. Hence for scaling we need to incorporate remote training features as part of the radio system to reach out to a greater audience without the need for such face-to-face interaction.

- 3. Extending the number of pilot locations:** Initially during the pilot phase scoping exercise we had planned for 3 radio stations. However based on the excellent response and keenness shown by additional radio stations that list has now been extended to 4. These include Radio ORTM Segou, Radio Moutian, Radio Sikidolo and Radio Saniya. In addition to the radio stations we also engaged with a very successful blogger in Mali, Boukary Konate who maintains the popular blog fasokan (<http://fasokan.com/about/>) extending the count to 5.
- 4. Organizational Setup:** - Since the inception of the project we have realized the importance of the organizational setup to roll out Foroba Blon suite of services. There has been sufficient buy in from the top, e.g. the radio management as in the case of ORTM Segou or Saniya Communications- the holding company of Radio Saniya. In addition to this organizational buy-in there also is the need for active correspondents who are linked to such radio stations to gain the real value of such voice based services. It is expected that where this structure is

present the uptake of services would be more due to the catalysing role being played by these correspondents within the local communities. Where such field support is absent the diffusion of real value may take a longer curve. Owing to this organizational learning we decided to drop the general public version of Foroba Blon as it requires extended training, and it is expected that radio stations with a strong correspondent community network will show the best results during evaluation.

5. Additional Services asked for: During the demo discussions revolved around several additional features and functionalities for the platform. Some of these that are now to be incorporated in the subsequent iteration are;

1. **Sharing** of broadcasts (like podcasts) amongst the different radio stations
2. **Diaspora:** Sharing the broadcasts for the diaspora
3. **Archiving** the broadcasts
4. **Privacy:** In certain instances (corruption reports against local officials / departments etc.) there is a need to maintain the privacy of the correspondent. A privacy feature may be essential in the future as there is greater uptake of the services.
5. **Moderation:** The moderation aspects in terms of policy and implementation need to be clarified for the community radios.

Note: Usability related changes were implemented in a sequential manner while we were on the road and gathering feedback. Please also refer to the Resource and Links appendix where you can test the application using the information provided

SUMMARY & NEXT STEPS

In addition to the technological aspects detailed in previous sections overall the services was accepted by an overwhelming majority. Radio stations in particular were cognizant of the potential such services hold for them in extending their reach to their communities while also making news generation and dissemination cost effective and timely for them. There were the ideals and mission of the project we started with.

The next steps for us include;

1. Finalizing the technology interface based on all the feedback we collected. We will add the diaspora dimension allowing them to access and post messages.
2. Identify the key constituents of a sustainable business model
3. Identifying missing requirements to be integrated in version 2.
4. Monitoring usage centrally as well as organizing and convening radio group meetings to understand and gather their feedback while continuing to propagate the benefits of Foroba Blon across community radio stations.

In addition to the above we are now focusing our attention to more important aspects of sustainability and viability. In a future scenario this platform can easily be used to plug in advertisement's that can be targeted towards rural radios thereby enabling a new revenue stream for the cash strapped community radio networks.

It has to be a right mix of services that are not only needed by the rural citizens but also something that makes existing process flow of citizen generated content easy to process by the rural radios. Training and capacity building of rural reporters is a key piece of this strategy. To meet this we have finalized a program to organize radio group meetings, release communique management guidelines and identify appropriate management structure within the community radios to better absorb Foroba Blon services.

While we were able to train the present set of correspondents, the real challenge is to generate sufficient momentum in the uptake and proliferation of Foroba Blon services through these agents of change. Our local partner Sahel Eco will be leading these activities on the ground and we will strive to report the outcomes in the final report by the end of November.

APPENDIX: RESOURCE & LINKS

Resources

1. Demo Platform

To access the radio platform demo refer to

<https://demo.webfoundation.org/radiomali/web/about.php>

This Web site is a demonstration web site to show how the Web Foundation Radio platform works and how community radio stations can access web content without any computer and any internet connectivity. Full documentation is available on the above link.

The radio station voice interface is available for test at

- Free Skype number: +990009369996149702
- USA Number: +1-202-559-0978
- UK Number: +44 203 6083183

2. Radio Website:

1. English Version: <https://public.webfoundation.org/forobablon/en/home.php>
2. French Version: <https://public.webfoundation.org/forobablon/fr/>

3. Other relevant sources

- Website W4RA collaboration: <http://www.w4ra.org>
- Website Regreening: <http://www.reverdirlesahel.org>

Photo, video and audio materials (made during the Mali roundtrip in February) available from

- ftp://www.akmc.biz/ShareSpace/W4RA-VOICES/IPI-Mali-12_17Feb2012/
(Circa 1.34 gb in total, folders organized per date, meeting and media type)
- Project team travelled through rural areas in Mali and talked to community radio journalists and village reporters, to know how they access and share news and information: A video linked to the previous field trip can be accessed at
http://www.youtube.com/watch?feature=player_embedded&v=zzWpZz3guul