

MatchMaker Resource Package
 2019 - Education Information
 Management Systems (Somalia)

Welcome!



Congratulations! You have been accepted into the MatchMaker program. We have created this resource package based on the application criteria you filled out on the Response Innovation Lab website and the interactions you had with the RIL MatchMaker in your country.

This resource package contains the top three organizations that we think offer the best solutions to your challenge. Within each of these summaries we will tell you about the organization, their key value to you, and how they meet your match criteria.

We will also share with you next steps and contact info at each of these organizations. We intend to sustain an added value relation with you, so we will keep in touch to support you and hear your thoughts and feedback.

Summary

LOCATION

Somalia

ORGANIZATION & WEBSITE

World Vision | <https://www.wvi.org/somalia>

SECTOR

Education

DEMOGRAPHIC

- Teachers who are working with schools in fragile and insecure locations.
- Children and young people.

HUMANITARIAN NEED

Resilience building, prevention of school dropout, youth training and livelihoods.

PROBLEM DESCRIPTION

We are seeking a solution in tracking enrollment and retention of children in schools. A lot of resources have gone into enrollment campaigns in the effort towards promoting access to education in Somalia. WV is looking for a mobile phone application that teachers can use to track daily attendance of all children in primary school. The platform can be monitored remotely by both WV in the schools we are supporting. For parents/caregivers with mobile phones, they can receive a notification if their children are marked as absent to also deal with truancy cases. This would provide evidence based data to our donors on other initiatives such as improved school governance by the community education committees who are also charged with ensuring children don't drop out of schools.

CONTEXT

The Ministry of Education in Somalia is in the formative stages of developing an Education Management Information System (EMIS) and NGOs, including World Vision, usually struggle to obtain authentic information on education indicators such as enrollment rates, retention rates, drop out etc.

In Somalia, most donors are keen on funding innovations that have been piloted successfully to ensure return on investment; as such trying out an initiative like this would be an uphill task for WV Somalia which is a grant-funded office.

In addition, WV Somalia does not have adequate staff and infrastructure in the ICT unit to develop a free mobile phone application for piloting hence the need for external support.

DESIRED SOLUTION CRITERIA

World Vision is seeking an innovation that is at least in the pilot stage and has been tested in a similar context. The desired solution is one that can be implemented immediately.

World Vision has some limitations in terms of donor restrictions and donor obligations. There is currently no funding to test a solution in the World Vision program.

Ideally support would come from a partner who works directly with the innovation solution

Important factors that need to be considered in the context are

- No internet or unstable internet
- Remote management / access issues
- Insecure environment
- Low or unreliable power access
- Protracted conflict

BUDGET & TIME

Budget: Solutions under \$1,000 USD is desired

Implementation Timeline: 1-6 months



Overview

World Vision's Challenge statement was investigated through a collaborative effort of the Somali RIL, the Global RIL, George Washington University, and the Somali Disaster Resilience Institute (SDRI). This process utilized the broad network and contacts within the Humanitarian Sector and Private Sector to source solutions that met the criteria and needs outlined in the challenge submitted by World Vision.

The request for an app to track school attendance was the first such request coming through the MatchMaker platform and investigation centered around both the Education sector within the humanitarian and development space, and within the private education space globally.

Special attention was given to finding an app that had been created or tested in a commensurate environment to where World Vision Somalia is operating, or an app that was free and open-source and had potential to be adapted to the Somali context. There are many apps currently developed and being used globally to track student attendance, however most of these had been developed for context unfamiliar to that in Somalia or were not open-source. There were some apps that have been developed and tested in the East Africa context, but have not been fully scaled (though their initial pilots have proved successful and provided encouraging results for the scalability of these apps)

In addition to the solutions from East Africa, another solution developed in North America was also included as it has been fully-tested and evaluated, is free to use and is open-source. This solution was included as it provides a good history of successful use by schools and parents, and it may be possible for this particular innovation to be adapted to the context that World Vision is operating in.

Digital Attendance App

An app developed by UNICEF as part of their 2014-2018 program to target 300,000 out-of-school children in Kenya

CU@SCHOOL

A Ugandan based app that has been developed to track and improve teacher and student absenteeism

My Attendance Tracker

School attendance tracker that also allows teachers to send notifications to parents

The Digital Attendance Application (DAA) will potentially be part of the Ministry of Education's program that will provide real-time data on the attendance status of individual children

Digital Attendance Application (DAA)



ABOUT THE ORGANIZATION

The United Nations Children's Fund (UNICEF) is mandated globally to provide and support humanitarian assistance to children in developing countries, and advocate for the protection of children's rights, to help meet their basic needs, and to expand their opportunities to reach their full potential. In Kenya, UNICEF is focusing on embedding children's rights within governance reform, reaching the most deprived children and to build the resilience of systems and households against recurrent crises. As part of its work in Education in Kenya, the Digital Attendance Application was developed (DAA).

KEY VALUE

The DAA was developed by UNICEF as part of its 'Operation come-to-school Kenya' that aimed to bring 300,000 out of school children into school. Part of this multi-pronged strategy was to transition schools from a paper-based school attendance tracker to the DAA. The app is available on and offline and is able to capture individual attendance of a student and generate an immediate report. Individual school data can feed into overall District/state data and can be disaggregated by school, sex, grades and allows the school and organization to track trends in attendance. The dashboard was developed to be accessible for UNICEF, Ministry of Education, Head Teachers and the implementing partners of UNICEF.

The app was developed in partnership with the Computing for Development (C4D) Lab at the University for Nairobi, and so they app would be contextually appropriate (or need little adaptation) for the Somali context. However, the original student developers have since graduated and formed their own firm called Sisitech.

Key Information

Continued work with the government and private partners aims to address the connectivity issues experienced in using this app (in Kenya) and the digital literacy barriers of teachers using it.

1. SECTOR

Education; Education in Emergency

2. INTERESCTIONS

Out-of-school; attendance and performance tracking; educational engagement

3. FOUNDED

2014

4. KEY PEOPLE

Daniel Baheta

Chief Education Kenya

Telephone: +254 715581324

email: dbaheta@unicef.org

5. LOCATION & WEBSITE

UNICEF

P.O. Box 44145 - 00100

UN Complex Gigiri, Nairobi Kenya

Tel: 254 207622183

6. RESULTS & IMPACT

To date has supported 233,627 children to enroll in school in Kenya

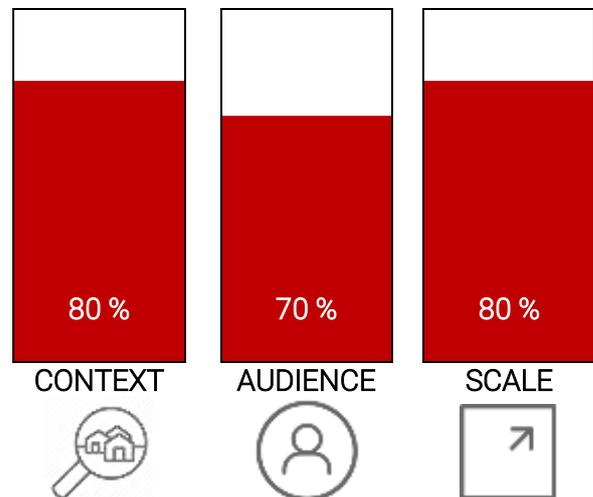
7. KEY ACTIVITIES

Education; Child Protection; Education.

8. NEXT STEPS

An introduction can be made to key people in UNICEF to discuss the DAA and what adaptations would be needed to scale this product into the Somalia context. It would also be useful to discuss the product with C4D Lab at University of Nairobi if it was decided by the applicant to scale this solution into the Somali context.

OVERALL MATCH



IMPLEMENTATION

Difficulty:

The DAA is a simple app, however UNICEF noted that there was limited digital literacy of teachers.

Time:

Data can be input on and off line by teachers and can be done in a short period of time. Reports can be generated quickly. The app has been tested and iterated by UNICEF and so the product is ready to implement.

Barriers:

UNICEF documented a number of challenges when piloting the DAA including limited electricity and Internet connectivity in remote areas, limited number of (Android) phones available in school, daily use of DAA by teachers without incentives (success when tied to cash transfer), timely provision of student data.

Cost:

Free to download and use.

Teacher absenteeism is at 20%-30%. And if teachers are absent, why attend as a pupil? Data is needed to address both issues.

CU@SCHOOL



MAKERERE UNIVERSITY

ABOUT THE ORGANIZATION

Twaweza works to enable children to learn, citizens to exercise agency and governments to be more open and responsive in Tanzania, Kenya and Uganda. Their flagship programs include Uwezo, Africa's largest annual citizen assessment to assess children's learning levels across hundreds of thousands of households, and Sauti za Wananchi, Africa's first nationally representative mobile phone survey. They undertake public and policy engagement through media partnerships and global advocacy campaigns.

KEY VALUE

Twaweza developed the CU@school app with the support of SNV Netherlands Development Organization in Uganda in collaboration with Makerere University Department for Computer and Information Technology. Unlike the other apps featured in this solution package this app uses mobile phones to monitor pupil and teacher attendance and absenteeism. This project recognizes that if there are high rates of teacher absenteeism, then there is no incentive for students to attend school and so it aims to tackle both these issues.

The product works by the head teacher entering the attendance figures of boys and girls and of male and female teachers using a simple pre-loaded form on their mobile phone. After the data is sent the numbers are automatically entered in a digital database, replacing any paper forms and separate manual data entry. The data is visualized (graphs, tables, geographical maps) real-time on the computers of district officials and the data can be used for decision making and follow up.

The pilot used open source software called open data that allows the capture of any data, anywhere, anytime on any device. The software was developed by a consortium and is designed for the African rural context.

Key Information

The CU@SCHOOL pilot project by SNV Netherlands Development Organization in Uganda ... uses mobile phones to monitor teacher and pupil attendance and absenteeism.

1. SECTOR

Education; Education in Emergency

2. INTERESCTIONS

Out-of-school; attendance and performance tracking; educational engagement

3. FOUNDED

2010

4. KEY PEOPLE

Peter Wakholi: pwakholi@cit.mak.ac.ug

Henry Kimera: hkimera@snvworld.org

5. LOCATION & WEBSITE

Tanzania, Kenya, Uganda

<https://twaweza.org/go/cu-school-tracking-school-attendance-in-uganda>

6. RESULTS & IMPACT

Piloted in 100 schools in Uganda. Based on the results of the pilot, successful, the aim has been to integrate the use of mobile technology in Uganda's Education Management Information System

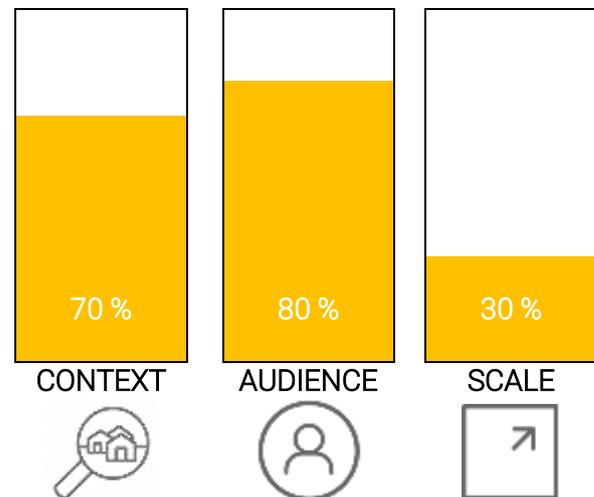
7. KEY ACTIVITIES

Education; public policy advocacy; citizen engagement

8. NEXT STEPS

Start discussions directly with Twaweza, SNV Netherlands Development Organization, or Makerere University.

OVERALL MATCH



IMPLEMENTATION

Difficulty:

Depends on agreed on scope on a program level.

Time:

Depends on agreed on scope on a program level.

Barriers:

Scalability and testing of the product since the project is still being developed.

Cost:

Unknown at this stage - depends on agreed upon scope on a program level.

“I started building MyAT because my wife asked me to help her track student attendance more easily... So I built her a simple way to track, view and report on the attendance of her classes online.”

My Attendance Tracker



ABOUT THE ORGANIZATION

My Attendance Tracker was born out of a need for better tracking of attendance and grades that was felt by teachers in the United States. The app was developed and iterated together with teachers, and now serves over 50,000 teachers, educators, parents and children.

KEY VALUE

The reporting of attendance can be done easily as the app can be used on mobile or web based, the subsequent reports are available online and can be linked to student grades and actions needed from parents and students. The reports are able to be downloaded if needed.

The user is able to set up student, class and grade dashboards that can be made available to students or parents as desired in order to motivate students, track trends and identify areas for improvement.

A parent messaging feature has also been developed to incorporate easier communication between teacher and parent. This feature was developed based on the context within which this innovation was born (i.e., the US) where there is almost ubiquitous smart phone use. It may be that this feature of the app is not relevant or useful in the Somalia context.

Key Information

A mobile and web based app that allows teachers and educators to record and track attendance information from anywhere and support overall management of a students' educational progress.

1. SECTOR

Education

2. INTERESCTIONS

School management; Education in Emergencies

3. FOUNDED

2016

4. KEY PEOPLE

Co-founders Jack and Carmen Baker:

<http://www.innovativeh2o.com/contact-us>

5. LOCATION & WEBSITE

Grimes, Iowa - United States

<https://www.myattendancetracker.com/mobile-attendance-app>

6. RESULTS & IMPACT

More than 50,000 teacher and school administrators have used the app to date to improve tracking attendance but also engage parents more fully in the education of their children, and preparing actionable student reports and grading.

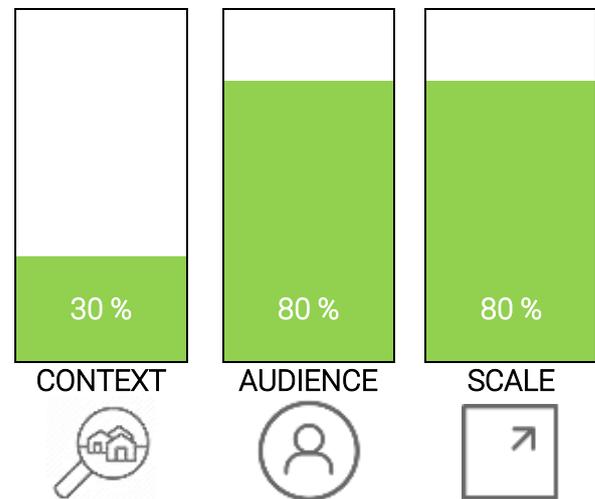
7. KEY ACTIVITIES

Attendance tracking

8. NEXT STEPS

Start discussions directly with the app company to discuss what, if any, modifications are needed for the product to be useful in the Somalia context.

OVERALL MATCH



IMPLEMENTATION

Difficulty:

Simple to download and start using for free for basic attendance tracking. The more advanced functions, such as tying grades to student attendance may take more time to master.

Time:

Can be implemented immediately.

Barriers:

The context that this app was designed in is not similar to the context that World Vision Somalia intends to use it. Careful consideration would therefore need to be given to applying to this application to the Somalia context.

Cost:

Free to download and try and then payment will need to be negotiated based on the use-case and volume.

Additional Insights

The following additional insights were explored as part of RIL's research process. While these were not deemed to be strong matches with the challenge, they are nonetheless interesting aspects that WV may like to explore in future or as complementary options.

Skoolop

<https://www.skooloop.com/Services-Features/School-Attendance-App/>

Skool Loop is a multi-purpose platform that has as part of it a smart classroom attendance tracker app feature. It has been used in Australia and New Zealand. It helps parents get the latest updates about events, including school term dates, parent-teacher meetings, and other activities at their children's schools. It is free but contains advertising and has not been tested in the Horn of Africa.

Atcovation

<http://www.atcovation.in/contact.html>

Atcovation is a school management app and web-portal which focuses on transforming the processes carried out in schools through web-based platform. The company is based in India. This is not free, it requires that parents have mobile phones to interface with the system and product and has not been tested in East Africa.

Teno

<https://tenoapp.com/website/attendancLanding>

After being trusted by 3000+ schools, Teno App launches its free online School Attendance app. School Teachers can now take online student attendance directly through Teno app and School Admins can generate attendance reports with a single click, saving them a lot of time and paperwork.

Due Diligence

The solutions presented as part of this Resource Package are provided based on the criteria that the MatchMaker applicant submitted in their application to the Response Innovation Lab (RIL) MatchMaker online tool. Wherever possible the RIL has provided solutions which align to the challenge and requirement criteria provided by the requesting agency. The suggested solutions are by no means an exhaustive list but provide insight and research into the challenge.

Risks and Due Diligence

As with all humanitarian programming, risks exist and the need for comprehensive due diligence is required. Before implementing any program, it is the responsibility of the implementing agency to undertake robust due diligence processes.

Humanitarian operating environments are complex, local dynamics can be fluid and understanding the local context is paramount in such environments to ensuring that humanitarian standards are reached and quality programming is delivered. It is for the implementing agency to consider in detail the local context, carry out due diligence checks, engage with local communities for feedback and to manage risks associated with programming. And it is within this context that this MatchMaker Resource Package is provided.

Further Support

For further information and support please contact:

Nishant Das, Somali Response Innovation Lab (SomRIL) Manager
Email: somalia@responseinnovationlab.com

SERVICES WE PROVIDE



1 CONVENE

- Discuss areas you want to improve, for better understanding and solutions
- Find innovations you can use in country
- Find innovators that you can work with in country
- Access innovation forums
- Join a community of innovators

- Refine your humanitarian challenge
- Search our networks for existing solutions, globally and locally
- Be paired with tested innovations that meet your challenge
- Get evaluation and implementation support



2 MATCHMAKER SERVICE

- Access funding pathways
- Get referrals to global innovation networks
- Plan your financial model
- Get support with monitoring and evaluation of innovation projects, business models ethics, intellectual property and so much more.
- Test, pilot, and scale innovations



3 SUPPORT