

# Ebola Recovery and Resilience Program (ERRP)

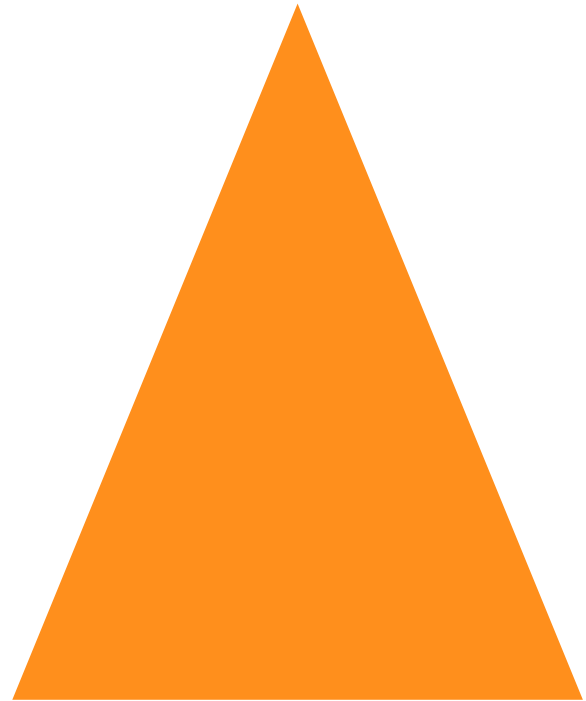
How one project created a  
complex electronic  
beneficiary registration and  
distribution system using  
off-the-shelf tools



by Leona Rosenblum

# CONTENTS

1. Objectives
2. System Design
3. How Does it Work?
4. Challenges and Lessons Learned



# Objectives

01

## OBJECTIVES

In May 2015, with the Ebola virus disease epidemic drawing to a close in Liberia, Ebola affected and vulnerable households needed support to get back on their feet.

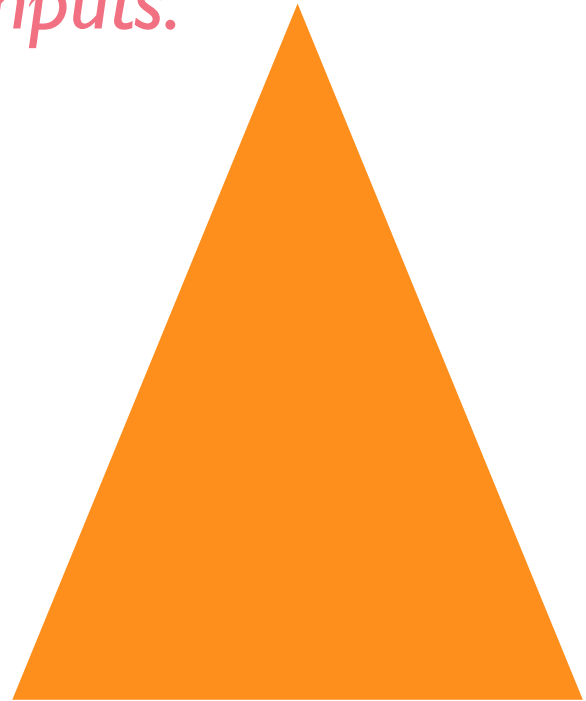
## OBJECTIVE

*The program was designed both to provide a temporary safety net during the lean season, and improve capacity of households to prepare for the next agricultural production season.*

# OBJECTIVES

*Accomplish this through three inputs:*

- *Agricultural (seed) vouchers*
- *Cash transfers*
- *Cash for work*



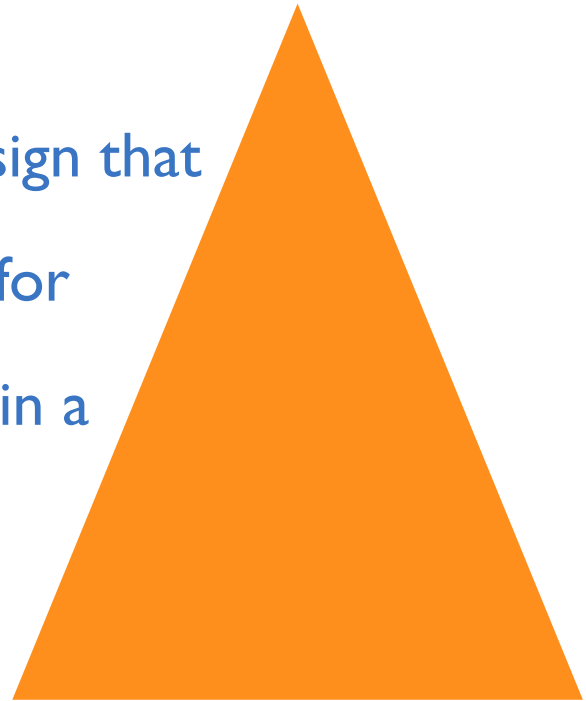
# SYSTEM DESIGN

02

# SYSTEM DESIGN

## *The need:*

An integrated cash transfer system design that captures beneficiary and logistics data for program management and monitoring in a safe, secure, and auditable way.



## SYSTEM DESIGN

Cash is a high value commodity, and the risks of leakage are increased when there is room for ambiguity in the system. The best check against fraud is transparency.

*Why is this so important?*

*Fraud.*

## SYSTEM DESIGN

*Why is this of general interest for digital health practitioners?*

Managing beneficiary registration and verification as well as tracking cash and mobile money distributions requires a complex set of workflows. But this system leveraged existing tools and linked them together to build a system, instead of developing new software.



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IN A WHOLE NEW WAY



making data  
work for  
you



**CARTO**DB  
Geospatial on the cloud

# HOW DOES IT WORK

03

# Mapping distribution points



# HOW DOES IT WORK

## Step 2: Registration



# HOW DOES IT WORK

Step 3:

Distribution




Three types:

- Vouchers
- Mobile Money
- Cash



# HOW DOES IT WORK

## Voucher Distribution

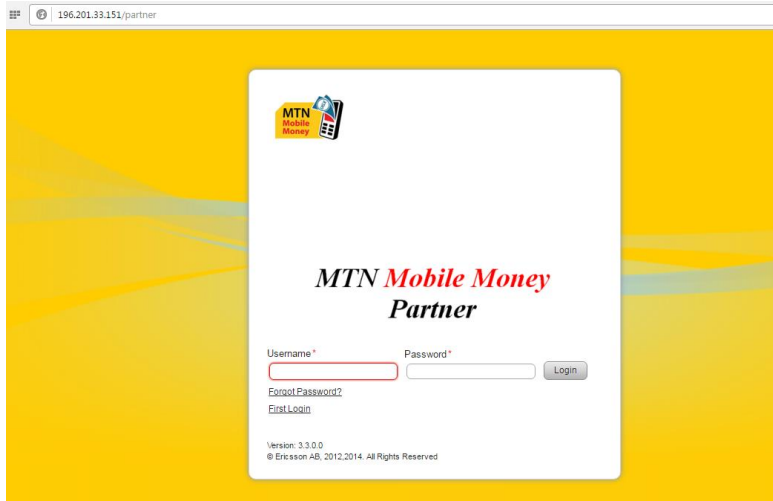
 <b>USAID</b> FROM THE AMERICAN PEOPLE <b>No: 03580</b> <b>US \$10</b> County: Nimba District: Zoe Gbao Community: Bahn VDP: Bahn HH Head ID: 244093787 HH Head: <input type="text"/>	 <b>USAID</b> FROM THE AMERICAN PEOPLE <b>No: 03580</b> <b>SEED AND TOOL VOUCHER</b> ACIDI VOCA ERRP AGRI INPUT VOUCHER SCHEME <b>US \$10</b> <div> <input type="checkbox"/> Cereals             <input type="checkbox"/> Pulses             Vendor: <input type="text"/> </div> <div> <input type="checkbox"/> Vegetable             <input type="checkbox"/> Tools             Employee: <input type="text"/> </div> <div> <input type="checkbox"/> QR Code              </div>
 Expanding Opportunities Worldwide	County: Nimba District: Zoe Gbao Community: Bahn VDP: Bahn HH Head ID: 244093787 HH Head: <input type="text"/> <div>          Developed in partnership with JSI       </div>

USAID		Predistribution Register - Totota						ACDI VOCA	
County	District	Community	Household ID	HH Head ID	HH Head Name	Recipient ID	Recipient Name	Group	Total Value
Nimba	Zoe Gbao	Bahn	244093787	244093787	John Doe	244093787	John Doe	PS	US \$ 10
Nimba	Zoe Gbao	Bahn	244093787	244093787	John Doe	244093787	John Doe	PS	US \$ 10
Nimba	Zoe Gbao	Bahn	244093787	244093787	John Doe	244093787	John Doe	PS	US \$ 10
Nimba	Zoe Gbao	Bahn	244093787	244093787	John Doe	244093787	John Doe	PS	US \$ 10
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Nimba	Zoe Gbao	Bahn	244093787	244093787	John Doe	244093787	John Doe	PS	US \$ 10
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Nimba	Zoe Gbao	Bahn	244093787	244093787	John Doe	244093787	John Doe	PS	US \$ 10
Nimba	Zoe Gbao	Bahn	244093787	244093787	John Doe	244093787	John Doe	PS	US \$ 10
Nimba	Zoe Gbao	Bahn	244093787	244093787	John Doe	244093787	John Doe	PS	US \$ 10

# HOW DOES IT WORK

## Mobile Money Distribution

196.201.33.151/partner








The image shows a web browser window with the address bar displaying '196.201.33.151/partner'. The main content area has a yellow background with a white login box in the center. The login box contains the MTN Mobile Money logo at the top, followed by the text 'MTN Mobile Money Partner' in a bold, italicized font. Below this, there are two input fields: 'Username\*' and 'Password\*'. The 'Username\*' field is highlighted with a red border. Below the 'Password\*' field, there is a link that says 'Forgot Password? First Login'. To the right of the password field is a 'Login' button. At the bottom of the login box, there is small text that reads 'Version: 3.0.0 © Ericsson AB, 2012-2014. All Rights Reserved'.

4662.5	231880149974 John Sackie	March ERRP Empowerment Payment
4662.5	231880150212 James Karmu	March ERRP Empowerment Payment
4662.5	231880150432 Okasu Kollie	March ERRP Empowerment Payment
4662.5	231880150487 Binda Jutuah	March ERRP Empowerment Payment
4662.5	231880150545 Andrew Paul	March ERRP Empowerment Payment
4662.5	231880150604 Prince Yallah	March ERRP Empowerment Payment
4662.5	231880150916 Isaac Kollie	March ERRP Empowerment Payment
4662.5	231880151210 Wishington Nyepan	March ERRP Empowerment Payment
4662.5	231880151405 Patricia Mayer	March ERRP Empowerment Payment
4662.5	231880151496 Hannah Daniel	March ERRP Empowerment Payment
4662.5	231880151753 Yassa Sam	March ERRP Empowerment Payment
4662.5	231880151903 Lahai Kromah	March ERRP Empowerment Payment
4662.5	231880152320 Mahamman Siayon	March ERRP Empowerment Payment
4662.5	231880152343 George Freeman	March ERRP Empowerment Payment
4662.5	231880152421 Klubah Nuwoe	March ERRP Empowerment Payment
4662.5	231880152494 David Bondo	March ERRP Empowerment Payment
4662.5	231880152517 Nowai Sackie	March ERRP Empowerment Payment
4662.5	231880152687 Mary Jack	March ERRP Empowerment Payment
4662.5	231880153124 Hannah Howe	March ERRP Empowerment Payment
4662.5	231880153282 Satta Flomo	March ERRP Empowerment Payment

# HOW DOES IT WORK

## Cash Distributions



USAID FROM THE AMERICAN PEOPLE		ACDI/VOCA Expanding Opportunities Worldwide	
ID No: 72749			
HH ID: Ben-17522		CDP: Benkormah	
	Name :		
	County :	Bong	
	Type :	Household Head	
	Name :		
	County :	Bong	
	Type :	Recipient1	
	Name :		
	County :	Bong	
	Type :	Recipient2	
IMAGE NOT AVAILABLE			
Authorized Signature			
		Developed in partnership with JSI	

## Step 4: Validation

# HOW DOES IT WORK

## Step 4: Validation

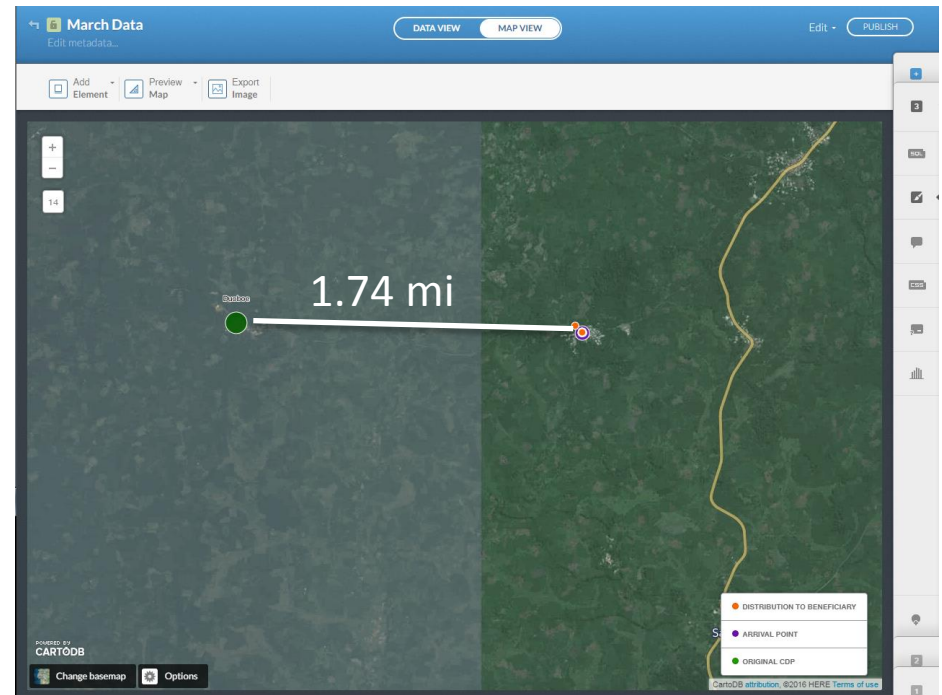
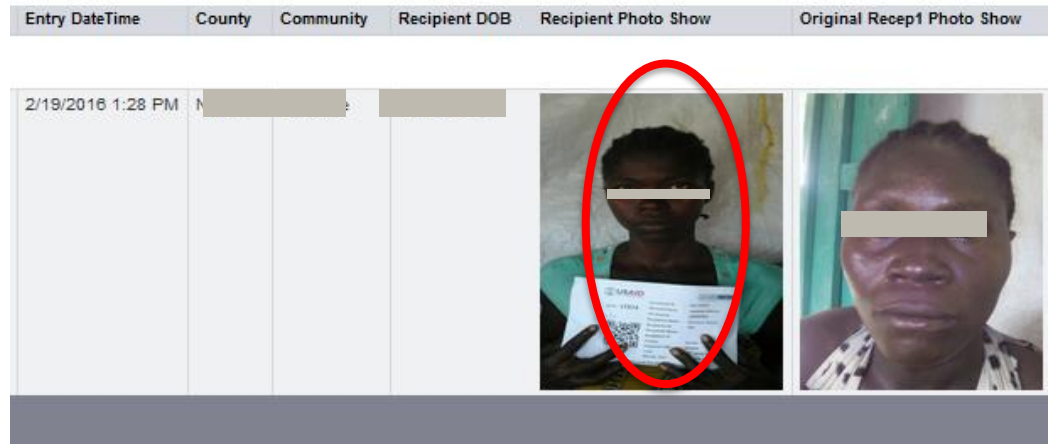
-Photo

-GPS

-Envelope QR

-Timestamp

-Staff ID



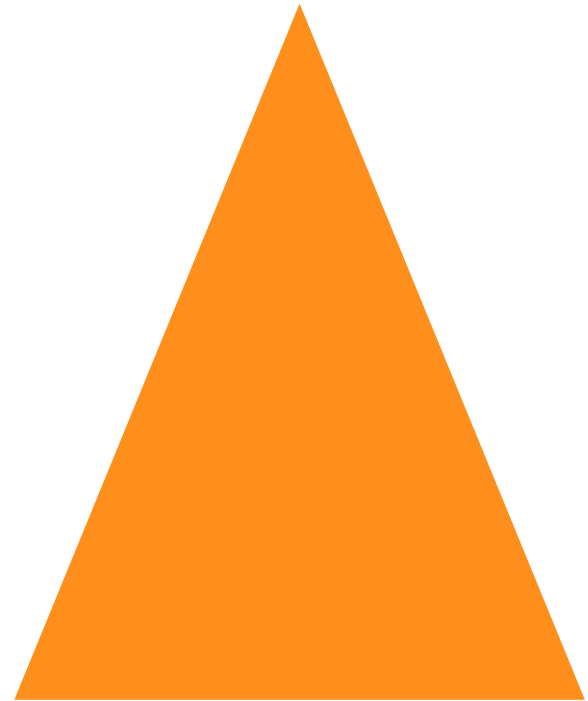
# CHALLENGES *AND* LESSONS LEARNED

04

## CHALLENGES AND LESSONS LEARNED

*It's not perfect, but it works (and it's better than paper!)*

- Can't ensure the right beneficiaries are registered, only that registered beneficiaries receive inputs
- Offline work environment means fraud is not caught in real-time
- Pushing existing software beyond its original purpose can lead to some awkward “workaround” workflows



# THANK YOU