

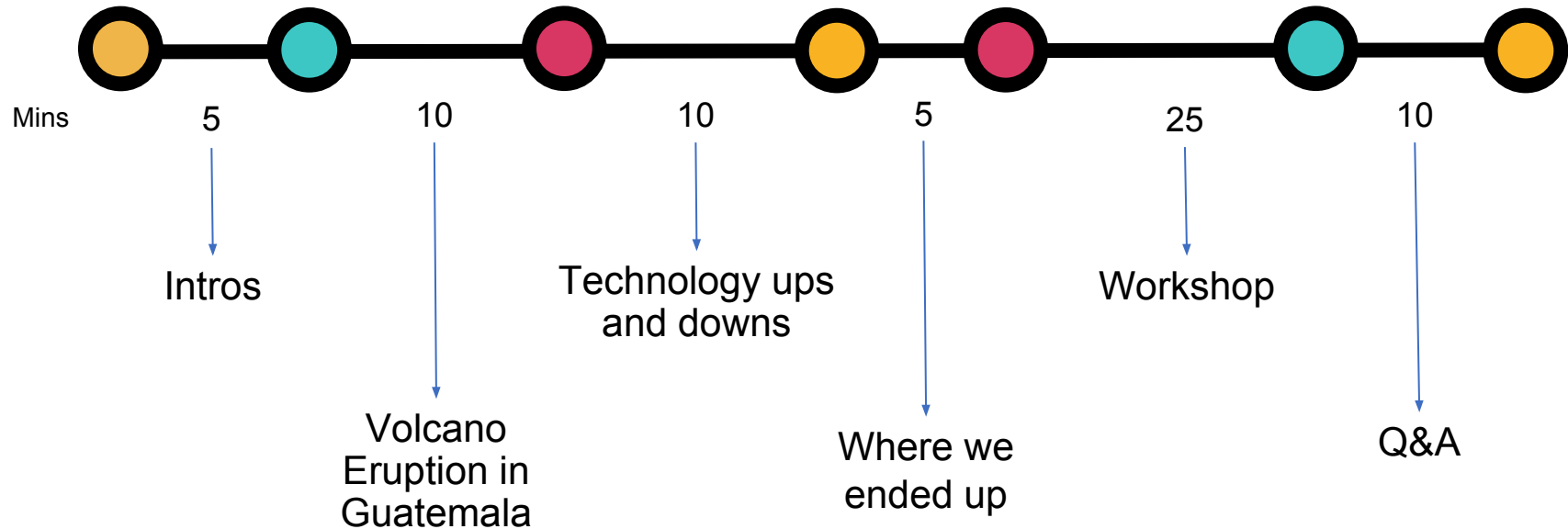


Technology for disaster relief: Lessons learned from Guatemala Volcano Eruption

Christina Jeffrey & Jade Parker-Manderson

December 10, 2018

Session Overview (75 Mins)



Who We Are

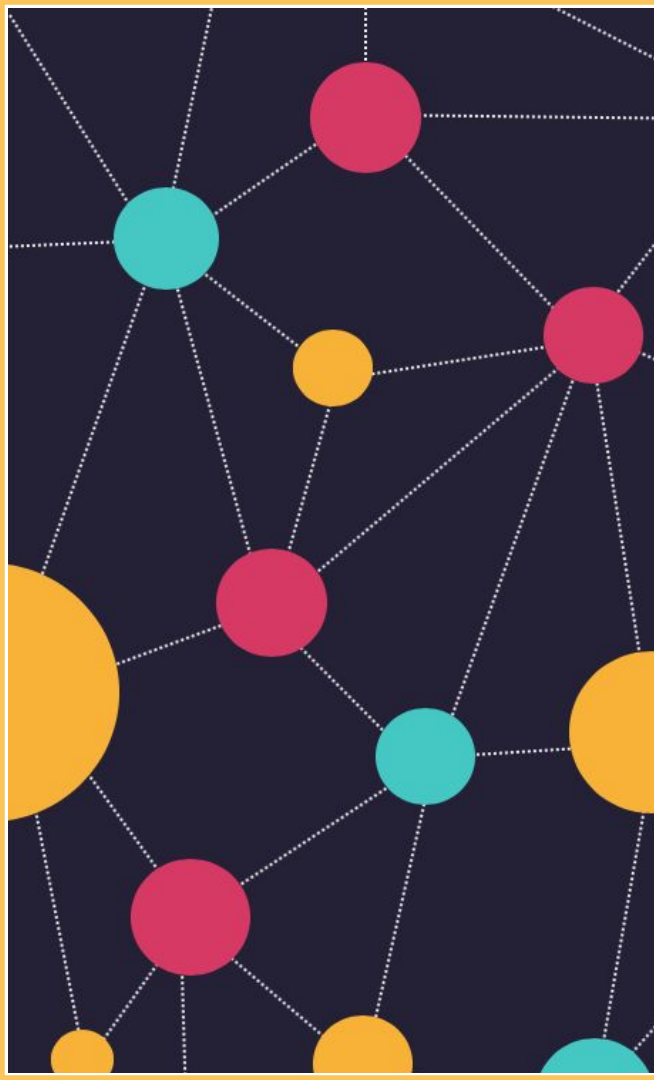


Christina – CEO, TecSalud

- Founder of digital development services firm headquartered in Bogotá, Colombia
- Specializes in Latin America & the Caribbean health, disaster relief, and migration technology programs

Jade – Clinical Nurse, Clinical Consultant

- Public Health Consultant in Latin America
- Trained in Major Incident Medical Management and Specialized in emergency medicine and medical education



Overview

About Guatemala

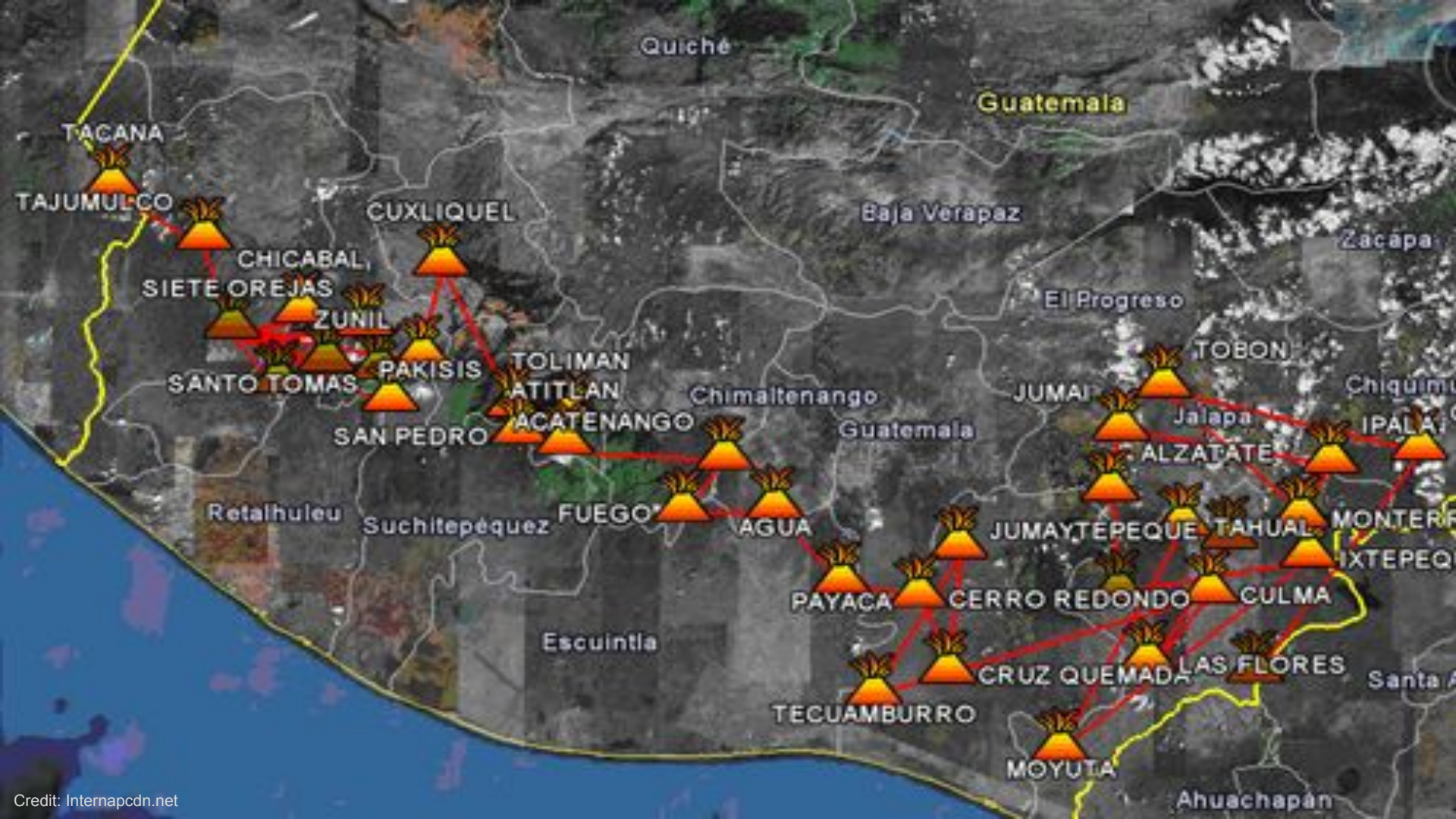


Credit: Britanica.com

- 16.9 million people
- 23 different languages spoken
- Near extreme level of malnutrition and poverty
- 37 Volcanos and one of the highest risk countries for natural disasters in the world.









Aftermath

- Death toll 128*
- Displaced 4,500*
- Villages evacuated: 9
- Villages affected: 14
- Shelters set up: 46+



Credit: Noe Perez/AFP/Getty Images

Aftermath: Problems Faced

Slow government response

Poor local/national coordination

Expired medical donations

Duplication of efforts

Gaps in relief areas

Overcrowding of shelters

Disorganized private donations

No security/control of persons entering shelters

Overcrowding of volunteers

Majority of shelters had poor WASH standards

Rumors running through social media

No inventory of available donations

Lack of shared protocols

Government mistrust

Chronic illness exacerbation

Unnecessary supply donation

Majority of shelters had poor WASH standards

Unofficial 'shelters'

Unsorted donated medications

Aftermath: Problems Faced

- Too much stuff
- Too many people
- No clear leadership
- Disorganization



Credit: Conredgt



Credit: Jade Parker-Manderson

Aftermath: Healthcare System

In the affected department
there is **1** Doctor for every
10,000 patients



Credit: electives.net

Aftermath: Healthcare System

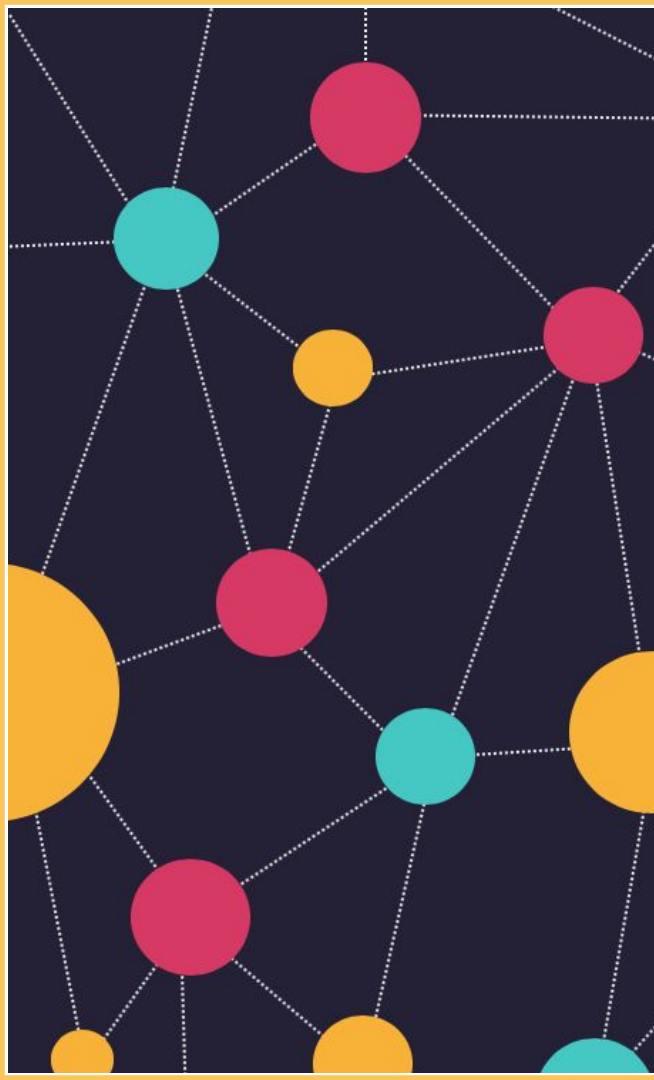
Out of 45+ shelters...

- 10 shelters had nurses
- 5 had volunteer doctors 24/7
- 2 health promoters (across all shelters) gathered statistics
- Varying # of Red Cross volunteers (with varying skills) rotated

Nombre Albergue	Encargado	telefono.
1) Area de Noe		
2) Albergue de Indios.		
3) La Oportunidad	Vicente Fernandez	31 69 23 17.
4) La Oportunidad	Sig. Maitenbo	4753 7547.
5) Iglesia Pan y Vino.	Rodolfo Hernandez	5856 4952
6) Iglesia Memento Zamar.	Erick Ochoa	5430 36 99.
7) Iglesia San Juan.	Carlos Larios	54 65 60 96
8) Iglesia Catolica la Indio.	Diana Nolas	4782 0922
9) Iglesia Evangelica Col. Ferro.	Denis Diaz	
10) Albergue		
11) Albergue		
12) Albergue		
13) Albergue		
14) Albergue		
15) Albergue		
16) Albergue		
17) Albergue		
18) Albergue		
19) Albergue		
20) Albergue		
21) Albergue		

Albergue	Nombre de Encargado	No telefono.
1) Salas Comunal ferro	Nancy 4160000	59301598
2) Iglesia Centro Amara ferro	Carlos Ramirez	54361180
3) La Ceiba	Nora Rafael Martinez	55597815
4) Modesto	Rolando Diaz	56802575
5) Portales	Jose Bonyo	41306508
6) Sebastopol	Blanca Caraza	56383654.
7) Incaachi	Yomara de Lech	32523294.
8) El Simón	Yulma Munoz	33157926.
9) Golondrinas	Ervina Rosales	54610928
10) Federal	Mercedes Baduo	32558976
11) Palmeras del Norte	Haito yac.	58705443.
12) Santa Ana C. 129	Ruth Argueta	43310891
13) Wera Vida	Gloria de Lopez	49588539
14) Apostolica Feuchstorf	Jaima Miranda	40526432
15) Iglesia Bautista Ocho	Rene Fuentes	58028114
16) Casa Manuel Vargas	Rosy Moran	59669384
17) Escuela Lincoln Madero	Irma Yolanda Hernandez	54132157
18) Iglesia Shadai	Sergio de la Cruz	50608477
19) Iglesia Jesucristo N. 2	Hilma Gajalben	54166624
20) Albergue	Emilio Calabrena	
21) Albergue Pilejo.	Elizabeth Kelgo	51243678.

Credit: Jade Parker-Manderson



Getting Organized



Credit: Jade Parker-Manderson

Field Work & Needs Assessments



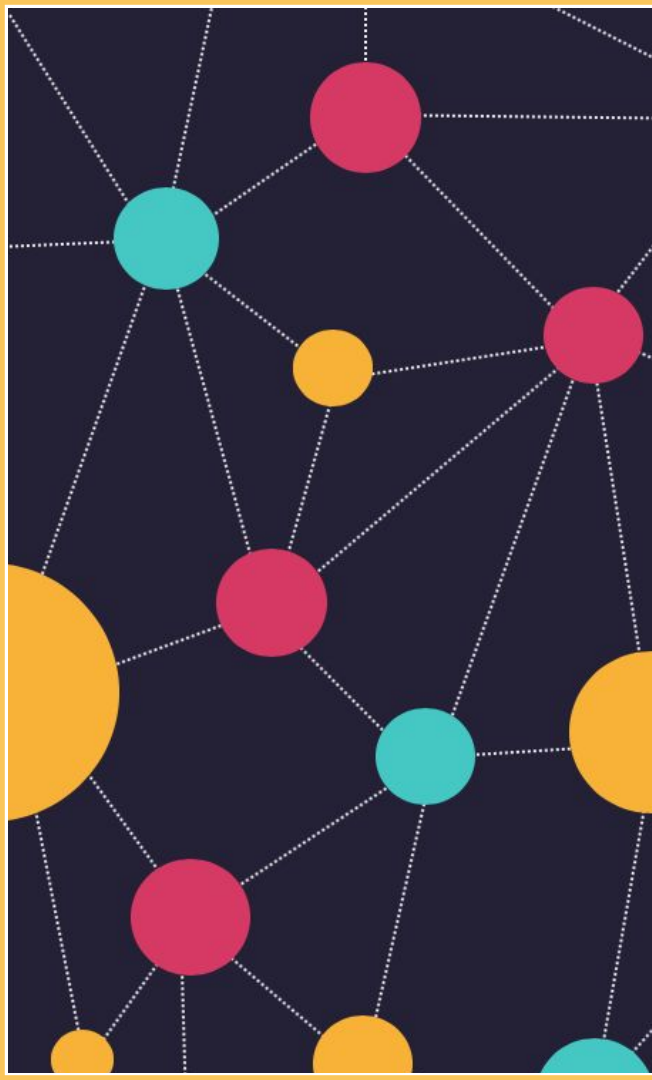
Organizing supplies



Improvement of shelters



Credit: Jade Parker-Manderson



Identifying Opportunities

Get better image of
Social media.

Social media to organize efforts and
focus support to desires areas or for
specific supplies.

Credit: Jade Parker-Manderson

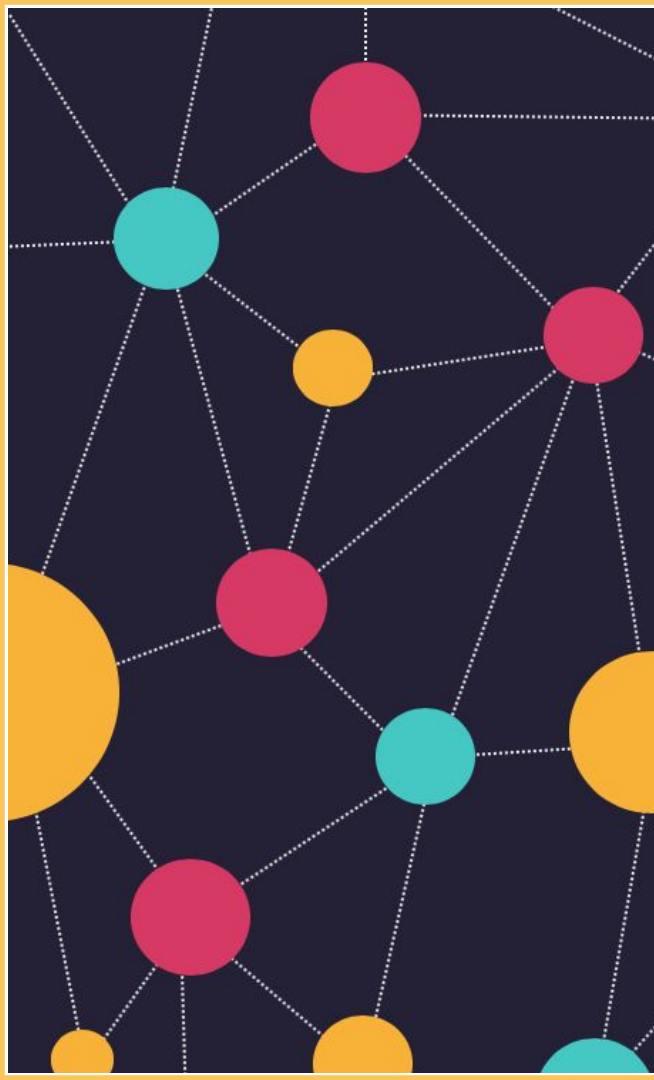
THE CLINICS AND HOSPITALS ARE
TREATING THOUSANDS OF PEOPLE
AND ARE IN DESPERATE NEED OF
MEDICAL SUPPLIES



TOMORROW I'M GOING TO VOLUNTEER
IN A MEDICAL CLINIC NEAR THE

Spirit of service from so many



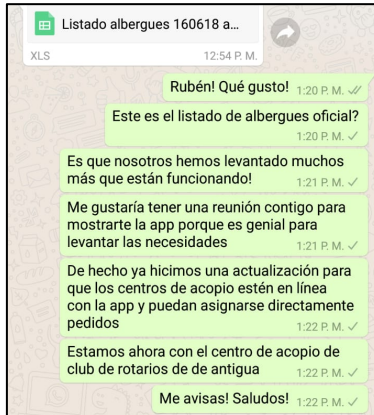
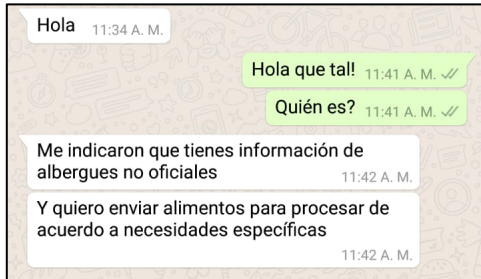


Optimizing Technology

Organize Social Media, Crowdsourcing and Communication

More than 20 WhatsApp Groups:

- Government groups
- Rescue forces
- Shelters
- Volunteers
- Volunca - volunteers
- Antigua community groups
- Antigua NGO's



Facebook:

- Guatemala Fuego Response
- Guatemala volcano relief
 - 1000+ members
 - No moderator
 - Requests to donate money
 - Private messages

Hello all, we have managed to collect a substantial sum of money to help. However I am looking for a sustainable way to spend it this year. I was thinking housing. Does anyone has some advice or tips who I can contact?

Thank you!

Hola a todos, hemos recolectado una suma sustancial de dinero para ayudar. Sin embargo, estoy buscando una forma sostenible de gastarlo este año. Estaba pensando en casas. ¿Alguien tiene algún consejo o consejos a quién puedo contactar?

Gracias!

Reduce Distraction

Google Docs

docs.google.com

CONSULTAS CLÍNICAS ALOTENANGO

Albergue Escuela Mario Mendez Montenegro

¿Dónde se está alojando?

☐ Albergue Escuela Mario Mendez Montenegro

☐ Anexo

☐ Anexo Alpha-Omega

☐ Externo (no albergado)

☐ Voluntario

☐ Otro

Número de Aula/Habitación

Choose ▼

ÚNETE A HACKATON

Tecnologías para la Gestión de Riesgos & Ayuda en Desastres

Sábado 9 de Junio
A Partir de las 9:00 am

antigua@impacthub.net

1a Avenida Nte I2A, Antigua Gt.

IMPACT HUB Antigua

JUN 9 Disaster Relief Hackathon
Public · Hosted by Disaster Relief Hackathon

Apoyo Clínica Temporal Alotenango

QUESTIONS RESPONSES 405

Muchísimas gracias por apoyar. Completa la siguiente información y nos pondremos en contacto en cuanto sea tu momento de brillar.

Nombre y apellido

Short answer text

E-mail

Short answer text

Celular

Short answer text



volunca.com

Saturday, July 28th

☐ 9:30am to 4:00pm
Escuintla

2 SPOTS LEFT

+ Atención Pediátrica

+ Atención Psicológica

+ Enfermería

+ Estudiantes de Medicina

+ Odontología

+ Voluntario General

Shifts

What's your email address?
We need your email so we can communicate with you.

Your email address:

☐ Check here if you do not have an email address.

Registration Information
Required fields are marked with an asterisk (*)

Nombre *

Apellido *

Choose a tool to fill the needs



What we need:

Technology Feature needs:

- Collect data on shelters & needs
- Create alerts for urgent requests
- Inventory catalogue
- Volunteer registration form
- Transportation requests
- Health intervention tracking
- *An easy way to match all of it*

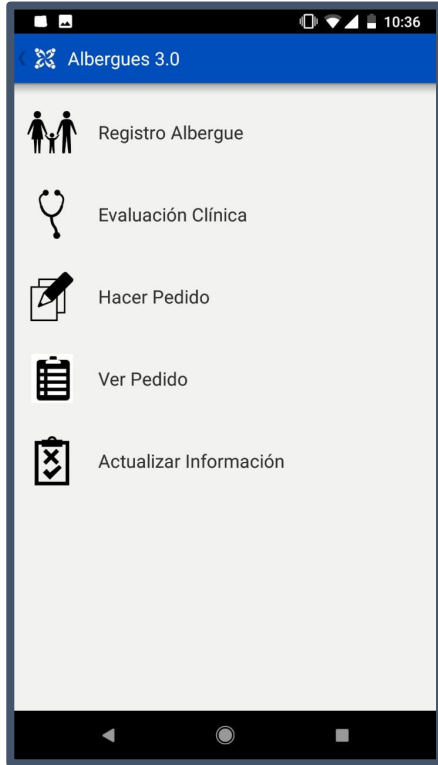
Human Resource Needs:

- A platform manager
- Data collectors
- Data analyst
- Technical support

Other needs:

- Funding
- Training
- Mobile devices
- Single owner
- Long-term planning

Piloting CommCare

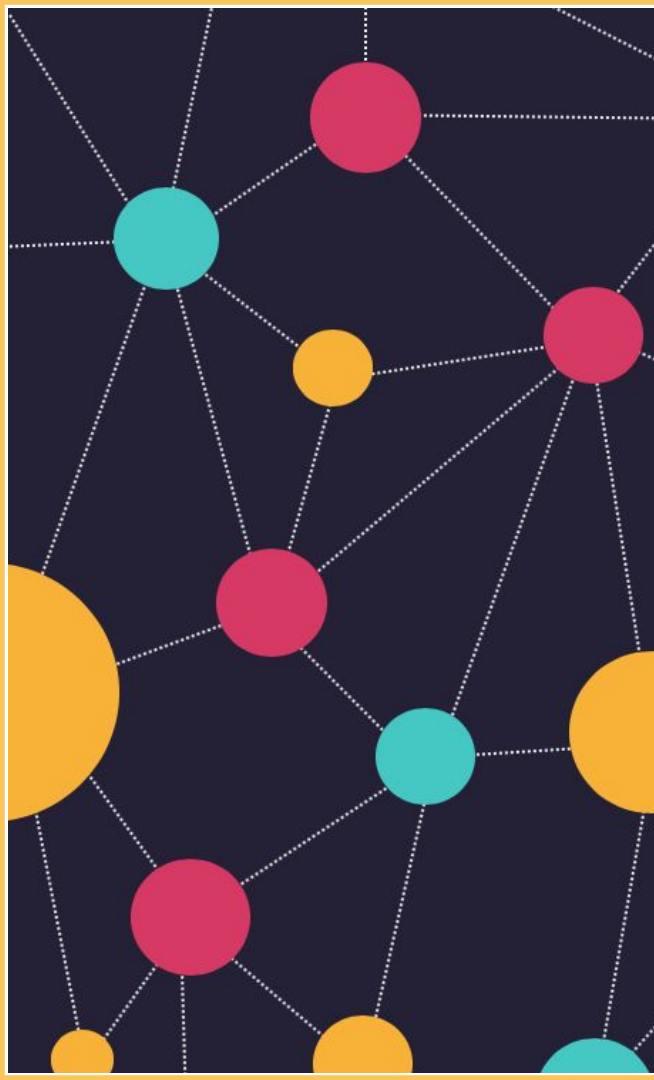


Why it worked:

- Someone with existing account used it temporarily to set up an application
- It runs offline
- It allowed for easy data input by anyone with the application
- Could achieve more data collection needs than google forms (but not all)

Why it didn't:

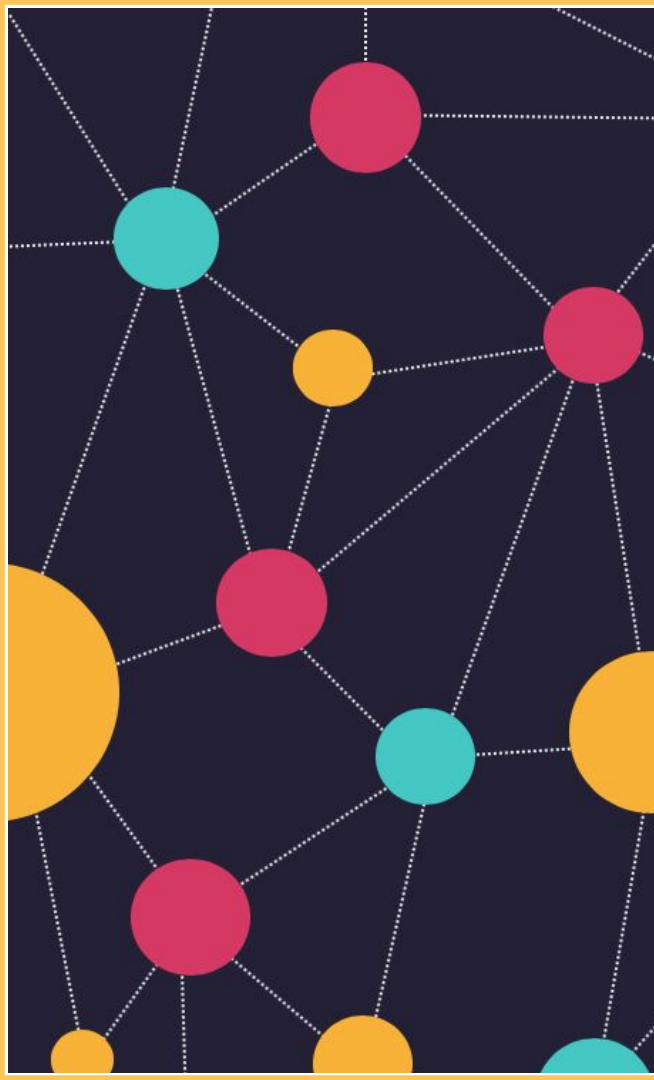
- Initial developer programmed clunky features that ended up requiring a paid subscription
- No one considered a long term data management plan
- Non-technical people need quite a bit of time to understand how to extract the data/use it
- No clear owner/hasty handoff to anyone willing to self-teach



Workshop

Goals – Workshops & Discussion

01	Tech recommendations	<ul style="list-style-type: none">• What have you used?• Why?• What features made you choose it
02	Technology needs	<ul style="list-style-type: none">• Needs for a technology during and after a disaster• Distractions & technologies specifically <i>not</i> needed
03	Social Media Best Practices	<ul style="list-style-type: none">• Key recommendations for Facebook• Key recommendations for WhatsApp



Questions