

# UX Discovery – Practical Action

A UX discovery process for Practical Action's Zurich Flood Solutions Catalogue knowledge sharing system.



## The problem

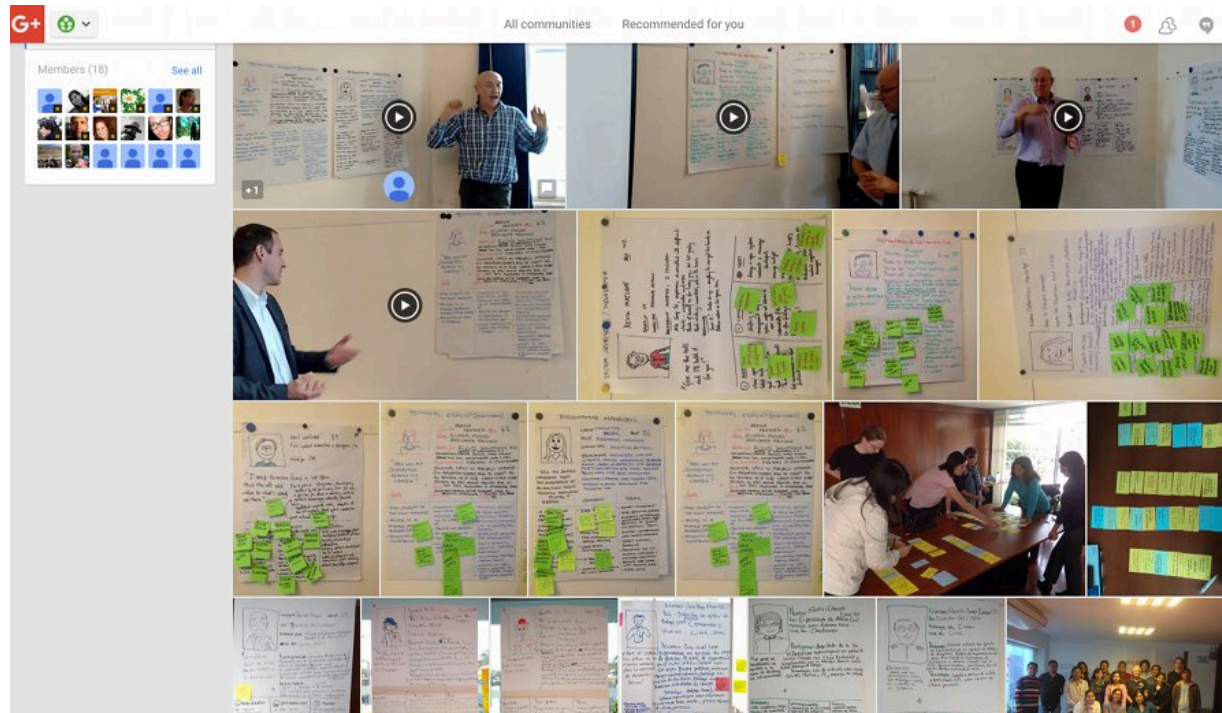
Flooding is a big problem in many parts of the world. Helping communities prepare for flooding by learning from other affected communities in different parts of the world, sharing this knowledge, and helping governments to be better prepared for response and managing risks is a valuable enterprise.

Practical Action commissioned Aptivate to do a UX discovery process for the Flood Solutions Catalogue. This formed part of the wider Zurich Flood Resilience Alliance, made up of the International Federation of the Red Cross (IFRC), the International Institution for Applied Systems Analysis (IIASA) and the Wharton Risk Management and Decision Processes Centre (Wharton). We were also asked to develop a central resource with a key aim of providing information and support resources for communities affected by flooding and the organisations

that support them in Peru. We aimed to run a UX discovery process and to train Practical Action in Lima to continue this work independently. My role was as a Spanish-speaking UX lead.

## The UX discovery process

We interviewed the main stakeholders in the project; these included community members from the river Rimac area of Peru, community leaders and national institutions that have a local presence and a large scope to react to flooding. Aptivate worked closely with Rob Cartridge, head of Practical Answers from Practical Action and also trained collaborated with Sapkota from the Nepalese Practical Action office, who provided valuable insights into the main issues.



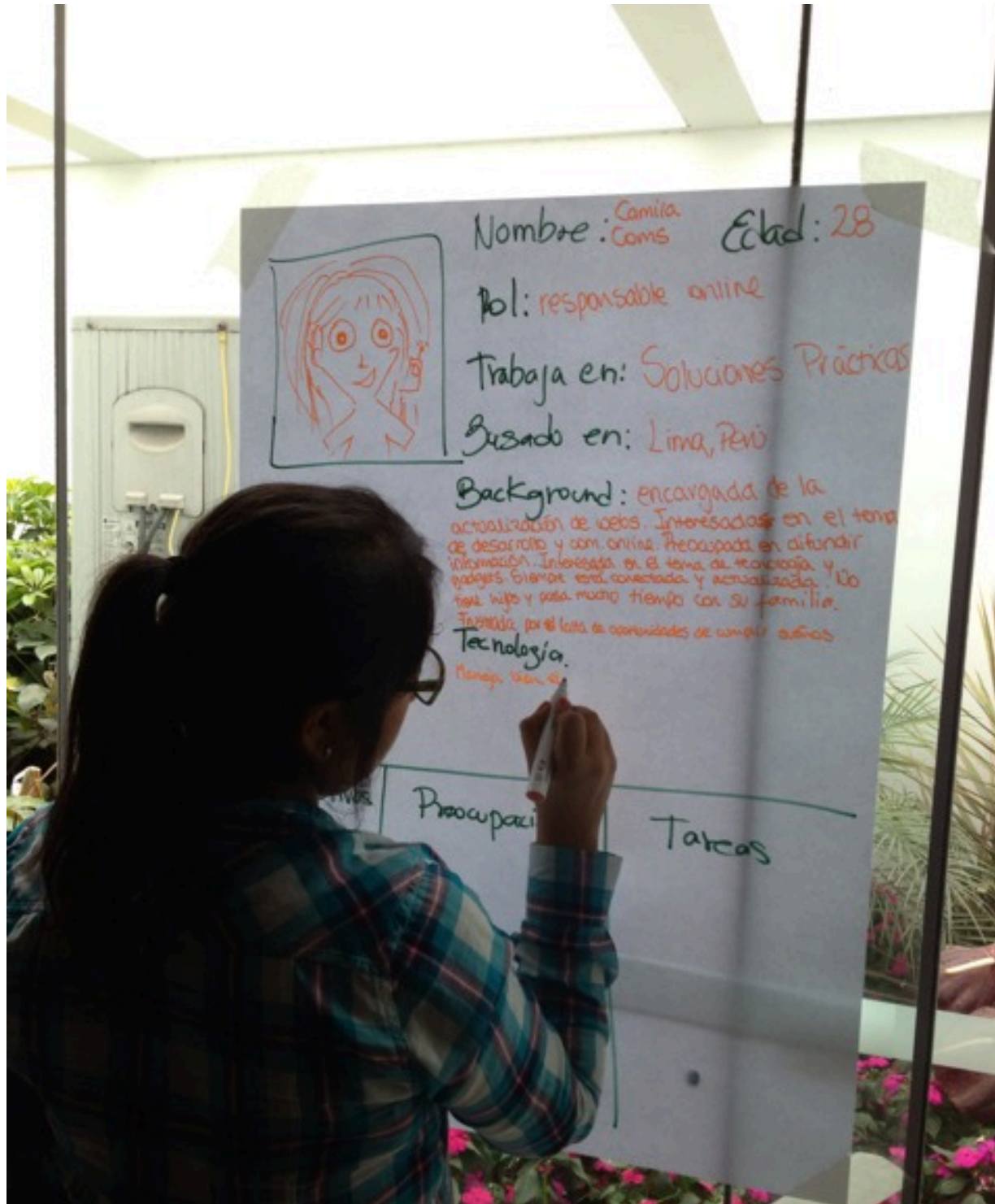
Google community for the UX discovery phase

# Participation

We made extensive use of Google+ community to contain all of the audio and visual output, as well as all the resources. This enabled a quick sharing of content and a very effective way to feedback to the users whilst keeping files together. We set up workshops in Lima with people from the community on the river Rimac. This gave us the opportunity to really learn about people's lives and the issues they faced. It was a very interactive and hands-on workshop, which really helped people get to know each other. As you can see from the image above – all stakeholders took active participation in the workshops.

## Language and translation

The workshops in Peru were run in Spanish and sometimes in English – particularly the second day which was just Practical Action staff. Sachin and Tom didn't speak Spanish so we brought in an Interpreter who would sit with them and translate quietly as we were going along. I'd never been in a situation like that before and it was a little distracting as I couldn't help but pick up the translations. There was a lot that wasn't translated – the small talk that carries a certain amount of valuable information. This was lost on Tom and Sachin. Once we got back to the UK I translated all the personas, user stories and other outputs into English to be included in analysis and reports.







Nombre: Juan Perez      edad: 35  
 Rol: Inspector técnico de Emergencias  
 trabaja en: Municipalidad de Lima  
 basado en: Lima, Peru

### Background:

Ingeniero civil, vino de provincia  
 estudio en Universidad Nacional, le falta  
 conocimiento práctico en el campo  
~~carada~~ ~~dos~~ ~~niños~~, sueldo bajo,  
~~tecnología~~  
 stressed y aburrido con su trabajo  
 muy técnico - la falta empatía  
 le pagan cada 3 meses, en leaf  
 tech. <sup>y comprometido</sup>  
 tecnología: no conoce lo social  
 baja confianza y manejo - no confía  
 en el - más en papel, email, mínimo  
 contacto personal. banda ancha, más baratas

(( Quiero información  
 útil, confiable y  
 amigable para  
 tomar decisiones  
 a favor de la  
 población con  
 la que trabajo ))

### 😊 expectativas

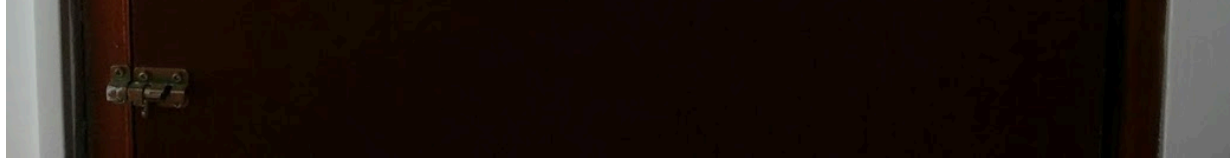
- o respaldo institucional
- o presupuesto para transport
- o equipos GPS/técnicos
- o que sea usada mi información.
- o cuenta que lo usa
- o instrucciones técnicas y practical
- o si se control lo social con lo técnico

### ☹️ Preocupaciones

- o no tengo contrato
- o no es legalizado
- o que la información sea actualizada
- o curso de actualización
- o que la información que el sube sea la que refleje la necesidad.

### 🕒 tareas

- o Estimación de riesgo
- o informes
- o reuniones
- o equipo de 3
- o Entrega de informes
- o consultas
- o subir data técnica
- o enviar informes



A persona created as an example to group



Nombre: Gladys Echevarria  
 Edad: 40  
 Rol: Especialista de defensa Civil  
 trabaja para: Gobierno local  
 vive en: Chacabayo

Background: Arquitecta de la Uni.  
 Villareal con especialización en gestión de  
 riesgos. Casada con 1 hijo. Entusiasta y  
 comprometida con su trabajo. Buena comuni-  
 cador. trabajo de campo.

“el portal de  
 inundaciones me  
 ayudará a la  
 toma de decisiones  
 con info actualizada.”

tecnología: uso de internet, redes sociales,  
 celular, laptop, PC, manejo de programas

∩

### necesidades

- info. histórica clasifi-  
 ficada de eventos  
 de riesgo.
- herramientas de  
 comunicación rápida.
- experiencias exitosas/  
 buenas prácticas.
- sistema de alerta  
 mejorado.
- info georreferencial.
- información geolocali-  
 zada de las localidades.

### preocupaciones

- información de calidad
- lentitud del sistema.
- problemas de conexión
- que no sea fácil o  
 ordenada p/navegar
- rotación de personal
- falta de capacitación

### tareas

- conocer puntos  
 críticos de zona.
- visitas de campo.
- coordinación con  
 población
- inspecciones.



A persona created by participants. We created 12 in total

### Some of the polished off personas – translated into English



*“A system that helps me streamline my work”*

template by: [www.aplivate.org](http://www.aplivate.org)

## Maria Sanchez

Director of mother & child health centre

Chaclacayo - Ministry of Health

Age: **45**

Loc: **Chaclacayo, Peru**

#### Background

**Pediatrician, studied at San Fernando. Married with 3 children. Medium income but financially unstable due to industrial action. Sociable, friendly but fairly stressed. She takes part in strikes and is part of union. She manages a team of 40 and various specialists. She does sport and eats a healthy diet**

#### Tech

Mobile phone and radio comms, always connected to the hospital network. She’s a basic tech user/office/search/social media she handles confidently what she knows



#### Tasks

- Ensuring that district health posts are functioning
- Managing team (rota, holidays etc..)
- Making sure everyone gets paid



#### Expectations

- Streamline bureaucratic processes especially connected with getting a unit mobilised in an emergency
- Easy to print information
- Short forms
- Implementation of medical infrastructure material



#### Concerns

- Budget for medical equipment is not enough
- Lack of staff when needed
- Lack of specialists
- Units of transport not adequate
- Industrial instability(strikes)
- Inadequate staffing budget



“Always alert to any emergency to give a timely systematic response”

template by: [www.aplivate.org](http://www.aplivate.org)

## Eduardo Dongo

**Director of COEN**  
INDECI

Age: **55**

Loc: **Lima, Peru**

**Background**

Retired army general specialising in disaster risk management. 10 years experience in the subject. He forms strategies for emergencies and defence. Married with two children. He's analytical, likes to plan and give orders as well as running operations in the field

**Tech**

Subscribes to alert systems. Internet, email, GPS. Uses latest equipment and is comfortable with those

---

**1 2 3 Tasks**

- Information filtering/debugging
- Activate early warning in an emergency
- Development of emergency plans
- Coordination with local and regional government

**😊 Expectations**

- I need official government information - local and regional
- Successful emergency plans
- Better channels of communication with local and regional government
- Historical studies on feasibility of Disaster Risk Reduction and management

**☹️ Concerns**

- Lack of quick-access info
- Difficult to access
- irrelevant information
- Not appropriate for all searches
- Network congestion in times of emergencies
- Slow response-times in emergencies

### What would you do with \$100,000

One of the more successful activities during both the Peru and UK workshops was to create a little competition for participants. Each group was given a hypothetical budget on \$100,000 to spend on a perfect system. They had to select and prioritise ten key user stories (what we called Epics) that would cover the key needs for their personas (each team had a couple of personas). They had some time to discuss their choices and to prepare a five-minute filmed presentation to senior staff. We had printed out some fake money and had some boxes of chocolates as prizes. Everyone hugely enjoyed the presentations and it created an amazing sense of purpose. In Lima, this was more pronounced. Groups were composed of people who were in one way or another involved with the problem of flooding. This ranged from a teenage girl from the flood affected community to a national government official, with a volunteer fireman and local government representative in the middle.



The presentations were really very good. A lot of thought had gone into them, and hearing them presenting their perfect systems, I realised that they had really designed them. They were very proud. One participant from one of the flood affected community told us all at the final go-round feedback, that he had come along to the workshop with no idea of what designing a website would be like and no idea of how he would have any possible input into that process. He said that after the day, he felt really happy that he'd taken part and felt that he really did understand that now and it had inspired him.



## User Stories, sorting and prioritising

The second day of workshops were dedicated to the more arduous task of picking all the sticky notes off the personas and converting them into well formed user stories. Once that was done we all got around the table to sort them out into clusters and to prioritise them according to what the participants had flagged as their top needs.



## Stage 2 – UK Headquarters

Back in the UK we worked at Practical Action headquarters. It wasn't clear to some of the participants in the workshop what they were being involved in. We received feedback that a better introduction to Agile practices and UX would have been a good idea to start. The UK workshops generally focused on joining the dots about how a system such as the Flood Solutions Catalogue would actually work and how the different partners would be able to produce and publish the resources in a centralised way and to facilitate the bubbling up of quality resources from flood affected communities. We explored user journeys using the user stories as well as sorting and prioritising all the cards.



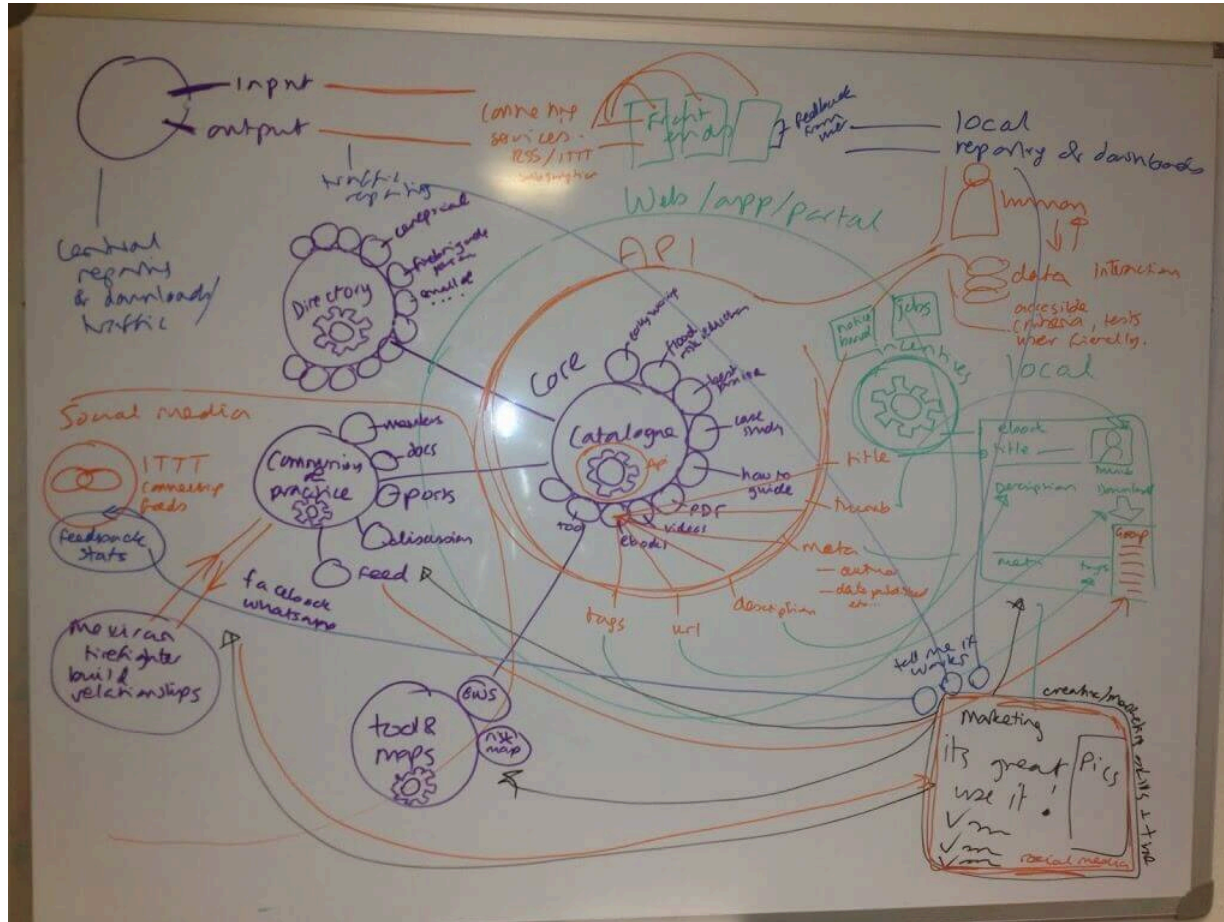
Presenting personas back to group



story mapping

### Analysis

We spent some time analysis the outputs from workshops and translating all content into English.

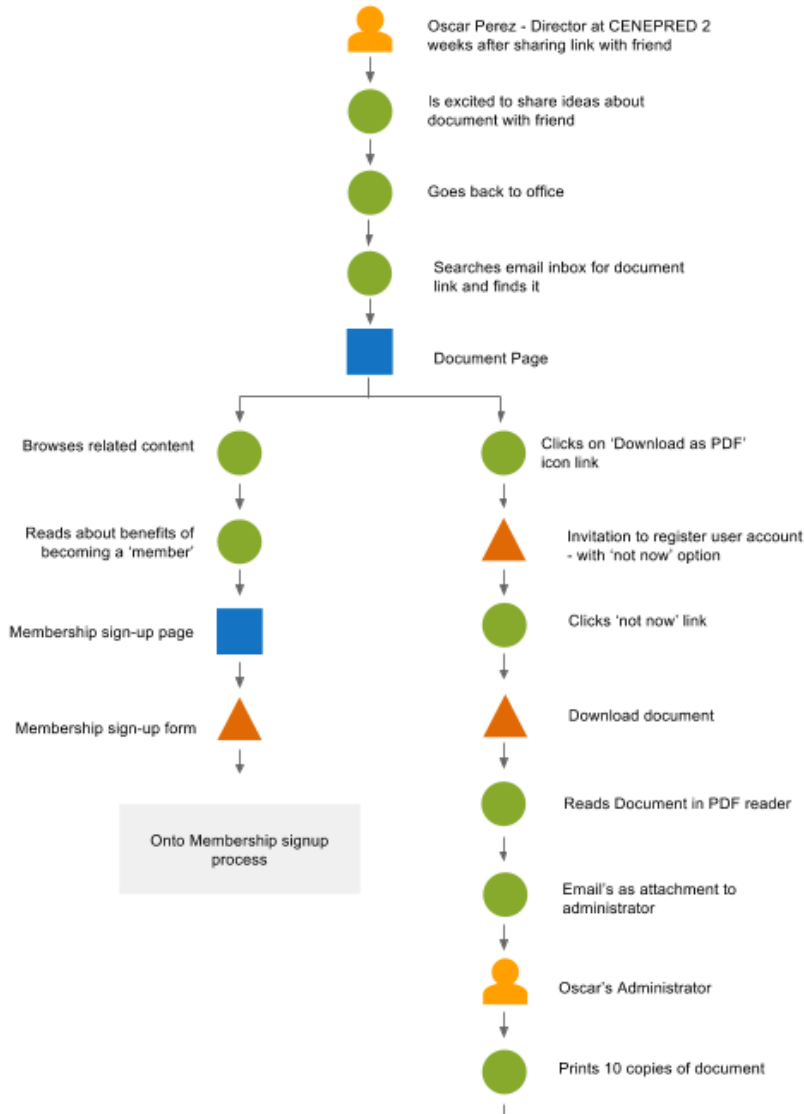


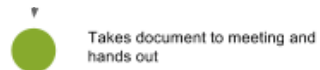
# Zurich Flood Prevention Catalogue User Flows

## Users:

Oscar Perez - Director at CENEPRED, Lima

### Downloading document, related content and printing





Available from: <http://bit.ly/1znPgxu>



Solutions Catalog - Workshop user stories

File Edit View Insert Format Data Tools Add-ons Help Last edit was made on December 8, 2014 by Martin Belcher

code	Usuario – User	english title	english user story
73 cards from Peru workshops over 3 days - 27,28,29 October			
<b>DP</b>	<b>8 cards</b>	<b>Usability</b>	
DP1.1	Juan Perez	A user friendly platform	As technical inspector I want a user friendly system so that I can use it
DP2.1	Maria Sanchez	Easy and Free Downloads	As director of a health centre, I want a information and downloads from the website that are free and easy to access, because we don't have a budget to buy information
DP2.2	Oscar Perez	Specific links (topic tags and type of information)	As a director of process management at Cenepred, I want specific links that take me to the information that I'm looking for, owing to the fact that I tend to go into complex websites and get lost without finding the information I need.
DP3.1	Jorge Steven	System updates	As project leader, I want a website update/upload report so that I can share this with the donor
DP3.2	Juan Perez	Frequently updated system	As surveyor I want information that is updated regularly so that I have more confidence in the information and so that I can do my work with greater efficiency
DP3.3	Juan Perez	Easy uploads	As surveyor of emergencies NML, I want to be able to upload information easily so that others can use the information I recompile, given that I may want to upload a lot.
DP3.4	Eduardo Dongo	Easy sharing of information	As director of COEN, national emergency committee INDECI, I want to be able to easily share information to improve channels of communication
DP4	Tatiana Garcia	Good Photos	As project coordinator, I want good photos of various sizes which are web ready so that I can use them in my reports

# The final report

The outputs of the UX discovery phase were a collection of media assets, training materials, UX deliverables, reports and tender document to facilitate with the development of the project.

Key learning that we aimed to communicate in the main report included recognising the gap of trust and communication that exists between local community members and local government. We made a bold suggestion that apart from the great work that Practical Action could make by creating regional and international resources, they should also consider appointing a person who's job would be to run social media groups and online communities of practice and to meet regularly with local government to help bubble up good ideas and pass back resources developed centrally.

The Flood Solutions Catalogue is currently being developed by Practical Action.

## Summary of features: Peru (73 cards)

prioritised by Practical Action, Lima, October 2014

view stories at <http://bit.ly/115lib>

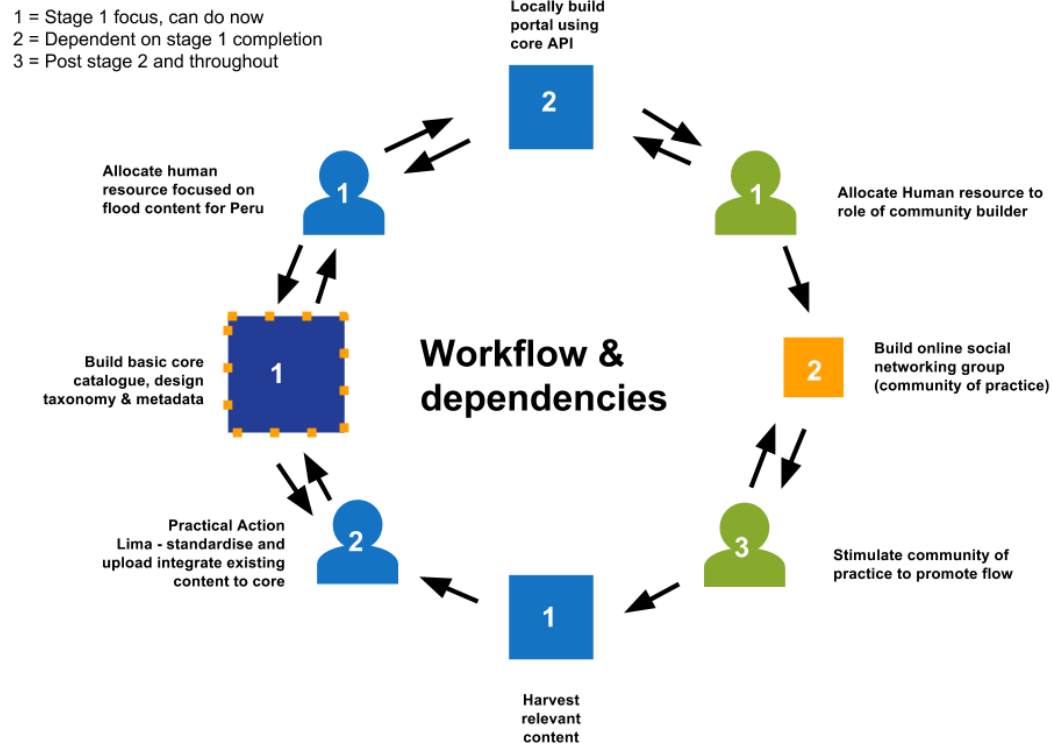
### Usability (8 stories in group) - 10%

- 1 A user-friendly platform
- 2 Easy and free downloads with good links
- 3 Easy and quick upload system
- 4 Frequently updated
- 5 Easy sharing of information
- 6 Good Photo management

### Tools and maps (7) - 10%

- 1 Interactive maps (satellite, flood areas, risks, historical) GPS adapted to mobile
- 2 Quick, simple form builder (emergency relief, community needs)
- 3 Equipment Inventory tool - help emergency services apply for funds to replace equipment

### Communities of Practice (12) - 16%



This entry was posted in *Projects, User Experience, User Research*. Bookmark the *permalink*.

← Microsite – Future Climate for Africa

UI design – Resident Music →



## USER EXPERIENCE



## INTERACTION DESIGN



## VIRTUAL REALITY

### Company info

---

Company number 10110666

### Registered address

---

C/O Ozkan Accountants Ltd  
2nd Floor, Suite 12, Vantage  
Point, New England Road,  
Brighton, England, BN1 4GW

### Find me at

---

Tel: 07929 865 498  
Email: [jay@rootinteractive.com](mailto:jay@rootinteractive.com)  
Github: [blujay](#)



Brighton, UK

info@rootinteractive.com

tel: 07929 865498

