User Research Report

Conducted at Training Workshop 7th Batch Subic 9/13th October 2017

Purpose

There is currently a scarcity of reliable, comprehensive and centralised baseline information on local disaster risks. The team at DILG have developed a digital portal (iLDRIS) that will help fill this knowledge gap, and allow users to track the implementation of the disaster reduction goals at the local and national levels in the Philippines.

The purpose of the research is to understand the end users of this system, asking:

- 1. Is our solution better than what the participants currently use?
- 2. Do people value the solution?
- 3. What is day to day life like in the Barangay and how will this affect compliance with the new system?

The overarching goals are to understand the exact nature of the problem that needs to be solved and start an initial conversation with the database users through open ended questions and discussion.

Methodology

We employed the Lean User Research Method, adopted from Silicon Valley startups. Lean User Research is quick and intuitive in contrast to peer reviewed research. In lean user research the findings are an aid towards creating the best product possible, the real proof is when people use the product (an unsuccessful product usually equals poor user research).

Our first observations were conducted through one on one interviews with eight barangay representatives (See Appendix 1 for a copy of the Questionnaire).

Results

Listed below is are key findings and responses from our interviews.

Key Characteristics of our Users

- The first round of interviews were conducted in a more technology literate region of the Philippines. Rural locations are reported to have varied circumstances which may increase difficulties.
- Barangay technologies vary but those in use include PA systems, walkie talkies, offline computer systems, social media plus paper information systems such as filing cabinets and document organisers. Radios are given out in emergency.
- Our users are technically sophisticated, but their technical expertise is narrow. They are mostly smartphone (rather than desktop PC) users.

Summary of Responses

The following themes emerged across all interviews

Users were generally very positive about the idea of using new technology, and can see the need, for this project. They are in theory open to change.
100% of interviewees reported using Facebook messenger. All have a facebook page to communicate with constituents.
Constituents contact the Barangay officials via facebook, sms and face to face walk ins.
Computers are used in some Barangays, but are often offline using the hard drive for storage.
In practice cloud based computing is not being used at the moment. A paper mindset is very prevalent.
They reported that it was not very easy to get data from the public.
English literacy is an issue. Many asked to have the forms in their own language.
Phone signal, wifi signal and electricity was of concern to constituents. For example one
Barangay said blackouts were common in heavy storms. This problem is particularly acute for desktop PCs, which need consistent power. It is less of an issue for smartphones and laptop computers.
A potential secondary driver for collecting data (from the Barangays perspective) is its use in a community service capacity (for instance students often come in and ask Barangay information to help with their school subjects.)

Sample responses of note from individual Barangay:

done, and 300 people attended.

-	Some Barangays have taken the initiative to do their own surveys already as they had no
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	community records.
	Nervous about giving over information and/or asking for it
	One Barangay conducted social Bingo when they needed to get a public administrative task

Some Barangays have a harder time than others depending on location/budget/resources
They need tech support, or a system that they are sufficiently familiar with that it does not need
tech support.
Some Barangays don't have access to basic resources, such as an evacuation centre. They have
had to rely on community members and private property owners in the event of emergency and
often can't use facilities for as long as they need. This concerns them.
NGOs and Corporations have shown an interest in offering help in the past.
The system form takes a lot of time and is easier for some than others, having them in their own
dialect has been requested.
Paper input and then data entry into the computer is common.

Possible Responses

1. Building the relationship is key

A key aspect of the project's success so far has been the emphasis placed on establishing relationships among all the actors involved. This is particularly important among the participating Barangays as it has been reported that they some do not understand the need for digital data or how it can benefit them.

The data collection itself can be used as an opportunity continue to build trust and the project brand, so that people feel comfortable submitting data.

Start slow, small and cautious, as first impressions count a lot. A wrong impression can jeopardise all future efforts at data collection. See the following link on the Australian Census disaster.

http://www.abs.gov.au/websitedbs/d3310114.nsf/home/Australian%20Statistician%20-%20Speeches%20-%20Census%202016%20Lessons%20Learned

Address current resistance by starting demonstrable anonymised techniques (such as a secret ballot) and a process that is clear to the users, whilst following and promoting the United Nations Privacy and Data Protection Principles:

https://www.unglobalpulse.org/privacy-and-data-protection-principles

Suggestions/Next steps

Create a small social media campaign aimed at the Barangays, that introduces some of these ideas (for instance how better data could help lift the country out of poverty, how better data could prevent the next Yolanda, etc etc.)

Interesting Reference Projects

Create success stories that build national pride and show how useful the data can be, such as the following:

https://www.unglobalpulse.org/projects/gaining-insights-sdg10-utility-data-2017

2. Use Appropriate Technologies

We need to balance project needs with the technologies already in use in the Barangay. Offering a choice of input methods will ensure high uptake.

The first step toward reducing paper usage is simply emphasizing the move toward reducing paper usage. It will take time, but in order to build strong digital data, the office environment will eventually need to support that.

Suggestions/Next steps

Try going paperless ourselves as a team for one month, see what insights we can discover.

Interesting Reference Projects

https://qz.com/339447/platforms-not-products-are-the-way-to-bring-financial-services-to-the-poor/#b02g12t20w15

3. Design the 'Service'

A service design that looks at behaviour outside of the digital realm, keeping the end goal in mind - digital, digital, digital! Through mapping the touch points, we may be able to discover some easy solutions that can move Barangays towards tech solutions.

Suggestions/Next steps

Conduct some observational research, and create a service map that details daily life in a sample Barangay.

Interesting Reference Projects

Activmobs (http://activmob.org/) (A project developed by the <u>RED Group</u>) Mobs are small groups of people who carry out activity together on a regular basis. They are connected by the Activmobs system. Activmobs is a platform for activity. It provides web based tools to help people find, suggest and start mobs, to monitor their progress, set goals and reward commitment. It provides support roles to motivate mobs and ensure their activity is effective.

4. Create an MVP using Agile Methodology

Finalise the MVP (http://theleanstartup.com/principles) and start a case study with one or two beta test Barangays on an ongoing basis. Be prepared for resistance, and be prepared to Pivot.

Suggestions/Next Steps

Recruit a couple of local Barangays to use as Beta testers, and schedule a one day visit to do some User Testing

Interesting Reference Projects

http://theleanstartup.com/principles

https://speckyboy.com/successful-minimum-viable-products/

5. Ensure that you Design an effective User Interface

Using Don Norman's approach to design, make the process as straightforward and intuitive as possible. If the participants take the time to learn a new approach, don't create unnecessary hurdles through bad design choices. Often, the form is just one component of a bigger site. Just as often, the form is an afterthought, and offers a terrible user experience. But in fact forms have; the greatest level of interactivity with users, unique elements and a real impact on the operations of the organisation. Hence, they must be considered as early as possible.

Suggestions/Next Steps

UI Review of the current system

Interesting Reference Projects

https://medium.com/hackerpreneur-magazine/modern-ui-ux-hacks-for-saas-applications-in-2015-and-beyond-f7b9a4f231dd

6. Offer multiple digital streams, ensuring 'user friendly' options are available

Use a multifaceted approach that encourages movement towards digital with multiple entry points (the forms, messenger). Include tech that is familiar. Utilise free, off the shelf tools when available such as google docs/dropbox/slack/google community). Consider providing data to certain Barangays and using them as a case study. Tackle hurdles in new and creative ways instead of defaulting to paper.

Suggestions/Next Steps

Create a small facebook chat bot to collect some sample data. (Attach relevant link)

Interesting Reference Projects

https://chatbotsmagazine.com/the-5-best-facebook-messenger-bots-you-should-try-immediately-d40f1acef767

Conclusion

The key finding of this report is that there is a real opportunity to improve the success of our project, by making a few simple changes in the methodology. If our project can address this one practice by incorporating user centred design, we could see enormous improvements.

This small change is significant, but important. If you're not designing for your users, then it's a total gamble whether your product will be any good. For developers and product designers, this often simply requires a change in mindset: Your product is not the 'code' - the quality, scalability, whatever, of your codebase is an *internal* quality measure. The product is what you put on screen in front of your users. They're not using code. They're using a service. That service must meet their needs.

Whether your product is any good drives project goals and project perception. If those goals are important, we do not want to leave it to chance that developers and product managers just happen to design good user experiences.

Appendix

User Interview Script

INTRODUCTORY STATEMENT

First of all, We would like to say that we really appreciate it that you agreed to join us today. It's great to be able to talk with you and have the opportunity to learn from you. Thank you for participating and providing valuable input.

The reason for this interview is that we are trying to learn as much as possible about people who might use a product we are currently working on. We hope that if we learn that, we will be able to come up with a product that meets your needs and the needs of people like you. Every answer that you supply is useful, as our aim is to design products that best serve you and your Barangay.

All of the insights that we record today will be on sticky notes, and non-identifiable. Please feel free to stop, ask questions or end the interview at any time. It is completely voluntary.

Do you have any questions for us before we begin?

QUESTIONS

- 1. Walk me through your last day at work in the Barangay.
- 2. What are all the different tasks you had to do in the past week?
- 3. How many people work in your team/organisation?
- 4. Who does what?
- 5. Do you use information systems in your daily life? If so what? (Calendars, Filing Cabinets, Folders, Diary's, Address books) Can you talk about the system that you find most useful and why?
- 6. Tell me about a time recently that one of these systems caused an unexpected problem? What happened?
- 7. Do you use technology in your daily life? If so, what? (For example: Cell phone, radio, smart phone, television.)
- 8. Tell me about a recent time that using a bit of technology was too difficult. What happened?
- 9. Do you use any forms of social media? If so, what?
- 10. Tell me about the most recent time that you used a personal computer (PC). Where was it, and what happened?

What was useful about this experience? What was difficult about this experience?

- 11. Tell me about a time that you last recorded Barangay information. How did you do it? How satisfied were you with this process? (Will be a 1-10 scale)
- 12. Think about the last three times someone else recorded information. Did they do it the same way or differently each time?
- 13. Tell me about the last time that you had to search for Barangay information? What happened?
- 14. How do you feel about using computers to fill in government data?
- 15. How do you imagine that the ILDRG might work?
- 16. What do you think the ILDRG's most important features might be?
- 17. Who do you think in your office would be most likely to use the ILDRG?
- 18. What could be improved in the IDLDR that would make it more useful in your daily routine?
- 19. Any final thoughts or comments that you would like to add?