Global Pulse
Challenge #2: Establishing Trust & Credibility

Global Pulse

June 3, 2011

adaptive path

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Introduction

About Adaptive Path

Adaptive Path is a user experience design consultancy founded in 2001. We help companies create meaningful experiences with their products and services through our consulting services. We push the practice of experience design forward with our public conferences and workshops. We share our ideas through writing, speaking and teaching. We have global reach but call San Francisco, Austin, and Amsterdam home.

We've been fortunate to work with some great organizations like, Twitter, Skype, Harvard Business Publishing, ASICS, Wells Fargo, NPR, PBS, United Nations, Greenpeace, Blogger, Flickr, Nike, Zappos, Thule, Sony and many more.

About This Project

The Global Pulse initiative aims to better track the impact of compound crises on vulnerable populations. The product is in the process of being designed and developed and the Global Pulse team is looking for an external design team to partner with during this time to increase their design capacity leading up to the release.

Adaptive Path will provide the Global Pulse team with additional design support for the design of the Global Pulse product. The project is broken into weekly sprints, each focused on a small, contained problem. At the end of each sprint, Adaptive Path will deliver the captured ideas for that week's focus.

Without a pervasive sense of trust in HunchWorks, its outputs will be untrustworthy. What mechanisms need to be built for users to establish trusted relationships with the system, its community and the hunches created by them?

Document Structure

The week 2 challenge has three outputs: Capturing and discussing the tough problems around the subject, design principles to guide direction and a conceptual scenario describing how trust could be nurtured in HunchWorks. The scenario includes factors of trust, an interaction flow and conceptual sketches.

Design Principles

Design principles act as declarative statements of what a solution could be. Principles can act as a north star of the design and help guide decisions.

Factors of Trust

The core issues that will need to be addressed in order to help a person gain trust in a particular area of HunchWorks.

Interaction Flows

Interaction flows create narratives around how individuals complete specific tasks. This output can illustrate the user's behavior and provide context that wireframes have trouble doing. Storyboards and/or user flows can then be used to develop the architecture, interface elements and interactions to support the ideal user process.

Concept Sketches

A sketch is not documentation, not all information to build is present. It removes all information, except what you care about. Capturing concepts at the sketch fidelity allows the design process to focus on quickly iterating upon and improving the core ideas necessary to deliver a quality experience.

Onerous Questions

How much can you trust an anonymous user, hunch or HunchWorks instance?

If anonymous users are able to participate on HunchWorks, there will need to be clear methods for other users to filter anonymous activity from their personal view. Anonymous participation should be allowed on the official HunchWorks system, but it should not be encouraged or incentivized. The level of privacy and data protection employed by HunchWorks should be clear to all users.

System-based anonymity should not be allowed on non-official installations of the HunchWorks software platform, as privacy and security cannot be guaranteed in these cases. Data privacy could never truly be assured and presents a significant security risk.

Where should HunchWorks' foundation of trust lie?

People will need to have an understanding of how HunchWorks operates and what mechanisms are in place to ensure quality and security. These mechanisms can stem from a organized central organization or from an empowered and motivated community. Each course will have significant impacts on how HunchWorks operates.

Trust in the HunchWorks system

If trust is generated through the HunchWorks system, people will rely on HunchWorks to manage, maintain and oversee the ecosystem of users, hunches and data to ensure that quality and accuracy is continued. If the system ensures that malicious users are not allowed to run rampant in the system, allowing greater users privacy will be less of an issue.

Trust in the HunchWorks community

If trust is generated through the HunchWorks community, people will rely on the fact that they know who their community members are, they know what they are doing and how they are doing it. If users are the system, user privacy becomes a hindrance it. A community-run system will likely need to have another tier of user along the lines of a community leader/organizer. This public-facing role will be the face of the community and will be tasked with keeping HunchWorks running smoothly.

Can HunchWorks function effectively in a completely decentralized system?

Likely, no. Anyone should be able to run an unofficial installation of the open-source HunchWorks software platform, but no level of significant trust can likely be fostered in HunchWorks without at least one sanctioned and verified instance of the system.

The relationship between Wikipedia and MediaWiki offers a perfect model for a community-run, open-source platform. Wikipedia is an official, centralized system that the public relies on for accurate information, while its open-source MediaWiki software allows anyone to create their own unofficial installation.

Design Principles

Trust is gained over time, but first impressions matter.

Establishing a strong presence takes time, but how you start off can greatly influence how significant that presence can become. It will be vital that HunchWorks not only acts in a trustworthy manner, but that it looks and functions in a trustworthy manner as well. Additionally, it will be vital to initially recruit a strong community of experts and institutions. That first generation of users will set the tone for community guidelines, culture and expectations.

Trust, but verify.

Given the importance of most, if not all hunches, simply believing a hunch should never suffice. Trusting a hunch can be the catalyst necessary to begin forward momentum, but the state of trust cannot be the last step in a hunch's lifecycle. To ensure a broader trust beyond the bounds of specific groups and social circles, empirical evidence must be the driver and foundation of solidifying a hunch.

There needs to be a face next to every hunch.

Anonymous participation risks eroding public trust in the system. User privacy is essential, but privacy should have to come at a cost. For hunches to be credible, people need to see that the creator is willing to put in name behind it. If a person is unwilling or unable to have a public profile, hunches created by that person are only visible by the people given access to the private profile.

Concepts

Factors of Trust

- Trusting the institution who owns and maintains the server(s).
- Having confidence that personal data and/or evidence submitted will be protected against malicious use.
- Understanding of how the structure, organization and processes of the system functions.
- Knowing that problems in the system (be it bugs, malicious use or inaccurate date) will be fixed promptly and correctly.

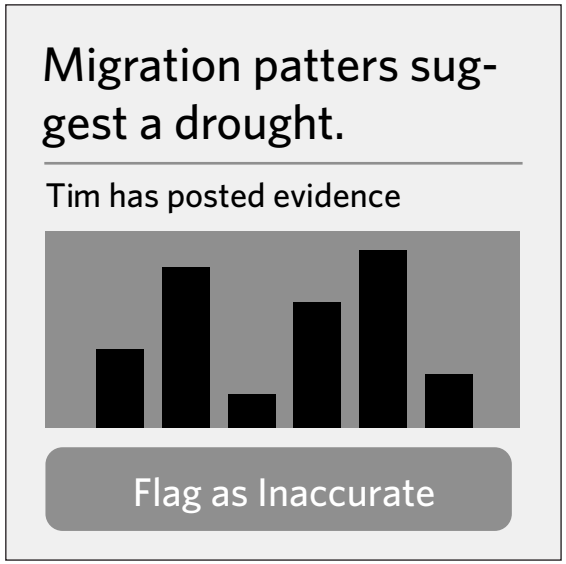
Interaction Flow

Andrew receives an email from a trusted colleague inviting him to join HunchWorks. Andrew has never heard of HunchWorks, so he is a little apprehensive to sign up for yet another web service.

During the sign up process, Andrew has immediate, clear access to who is backing the initiative, who owns the servers, who is leading the instance, where the data is hosted, and who are the prominent community members helping further the community. Additionally, the system guides Andrew as to what is type of personal information is safe to post and what is not.

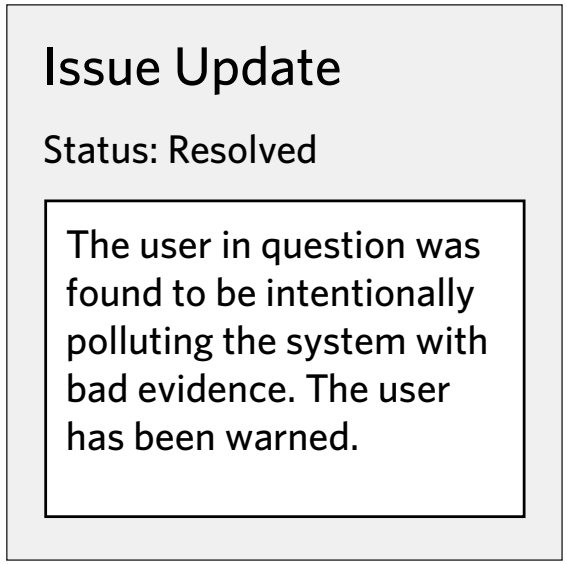
After signup, Andrew is receives a welcome message from a community member who lets him know that he is his advocate. The advocate is there to help him understand how to participate and to answer any questions/concerns when beginning the process.

Interaction Flow (cont.)



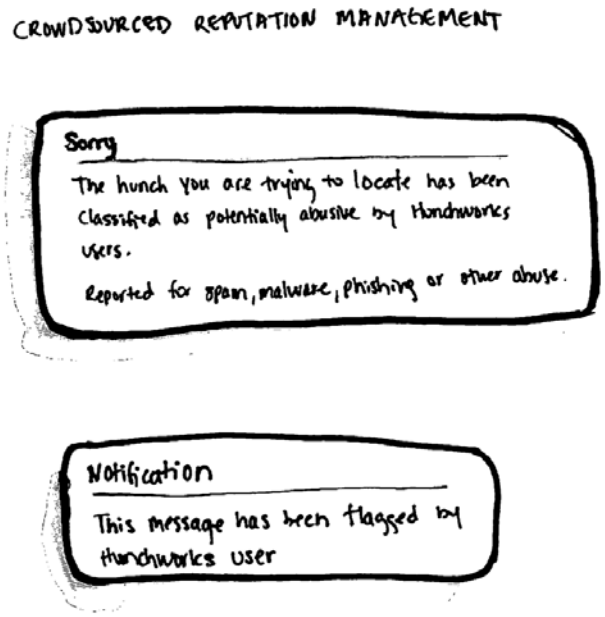
Some time has passed, Andrew now an active member. He runs across evidence in a hunch that he knows is inaccurate. The user posting the evidence seems to have a history of this. Andrew flags the data as inaccurate.

Andrew thinks this is worthy of notifying someone. He posts an issue with his advocate about the potentially malicious user. The issue gets recorded in an issue tracker. Andrew can observe the process to see the end result.



Two days later, the issue has been updated. The user has been deemed malicious and appropriate actions have been taken. Andrew is able to see who made the final judgement and the log of conversations prior to it.

Concept Sketches



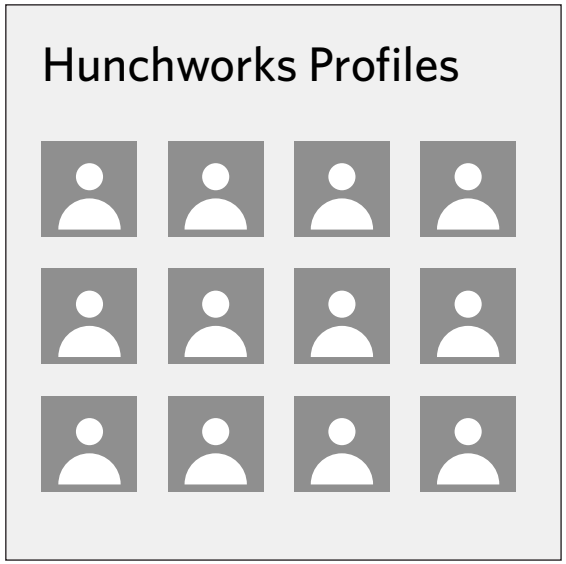
Crowd-sourcing the Global Pulse community to filter or flag suspicious hunches requires trust in each other rather then expecting users to trust the "powers that be." Most of us trust our friends over the system.

For many, trust is formed 1 to 1. When a new user joins the HunchWorks community, the Community Leader should be tasked with reaching out to the new user within this community. This will not only make the system feel more human but also encourage interaction and collaboration from the very beginning.

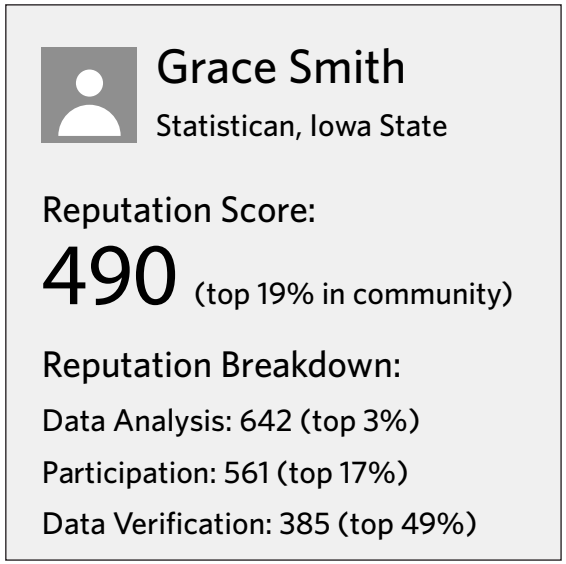
Factors of Trust

- Knowing they are who they say they are.
- Having an informed understanding of their background.
- Being able to see that they are providing worthwhile contributions.
- Seeing that they are a committed community member.
- Knowing that they trust you as well.

Interaction Flow



Andrew is looking to work with someone to help move a hunch forward, but he is more apprehensive than most on who he forms connections with. Before he is willing to commit time and effort with someone, he needs to know it's worth it.



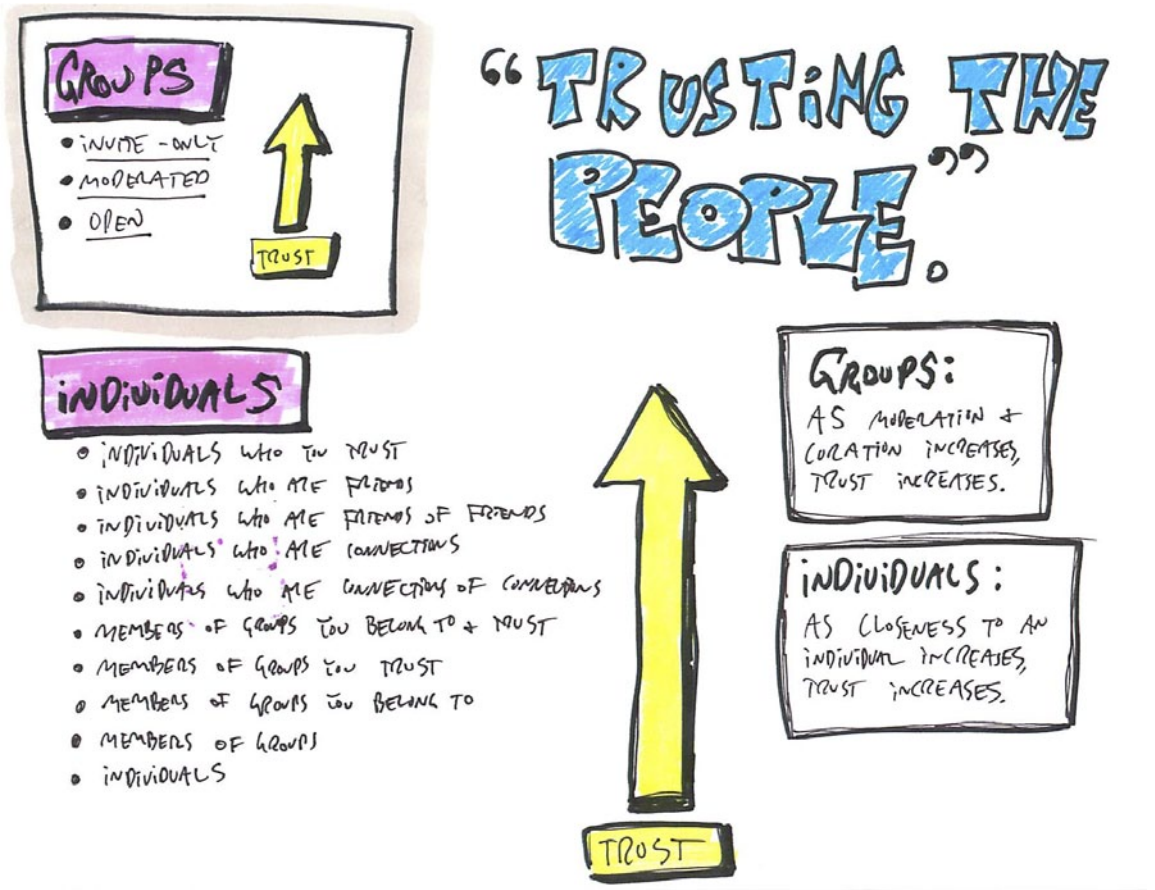
Andrew has great things about Grace, who has been doing some great work in analyzing data sets for other users in the community. Her profile is makes this very clear through her participation history and reputation score. Of particular interest is her notably high score pertaining to data analysis.

This holds a lot of weight with Andrew, but he wants to know that Grace has a strong academic/ professional background in data analysis. Fortunately, Grace has posted her CV to her profile and her background is quite extensive.

Concept Sketches (cont.)

Andrew also notices that Charlie, a very well respected expert in his field, has vouched for her. Considering that the number of vouches each person gets is limited, this is significant. Andrew is now very confident in reaching out to her.

Concept Sketches

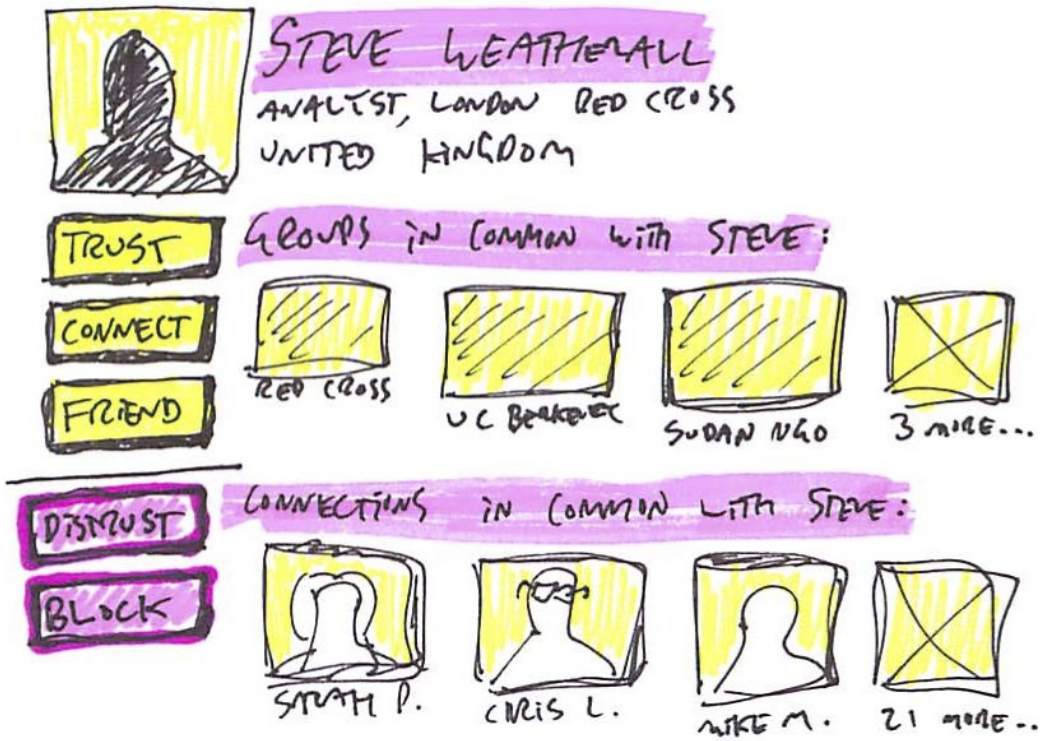


This sketch illustrates the levels of trust inherent in the system. Groups should be flexible enough to allow numerous applications, but the amount of trust given to members as a result of their membership should be influenced by the level of moderation of the group.

How much you trust another HunchWorks user is determined by how closely the two of you are connected within the system, whether through groups, connections or friends of friends.

While these links determine the implicit trust between users, the actual act of "trusting" a user manages explicit trust, which is given more weight than these other connections. Additionally, users you trust that are highly trusted by other users, or may be members of official groups, will be more trusted as well.

Concept Sketches

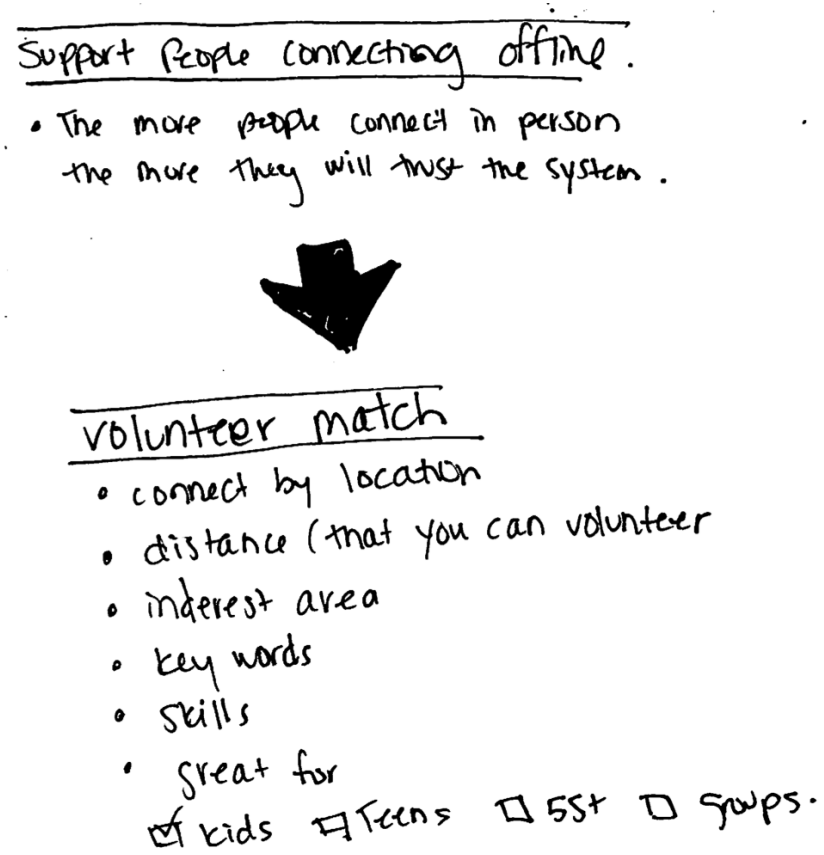


A key way to quickly establish trust between HunchWorks users is to call out traits that they share with one another, including groups, connections and friends they have in common.

Connecting or becoming a friend with someone is different than actually "trusting" that user, their comments, their hunches and their evidence. Depending on how actively and transparently the HunchWorks system should manage "trust" relationships, it may need to be its own independent activity.

Alternatively, a way to quietly "distrust" or "block" users may be necessary to ensure a good signal to noise ratio in a user's view of HunchWorks.

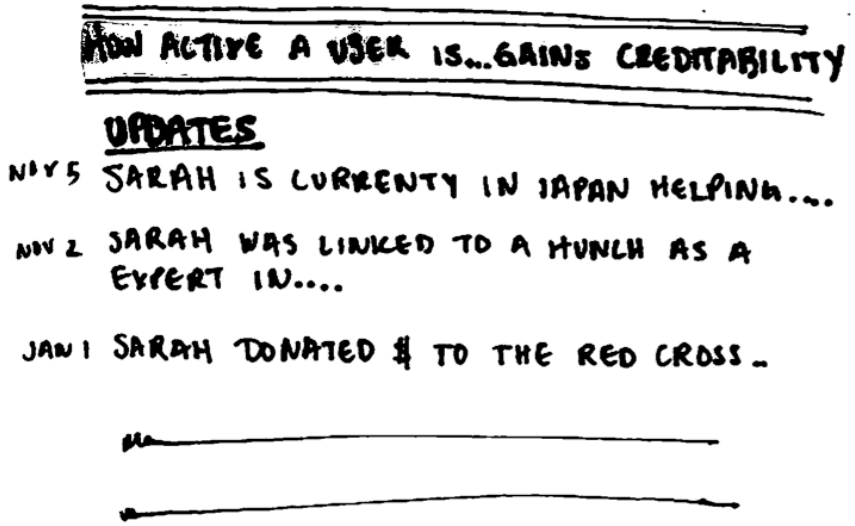
Concept Sketches



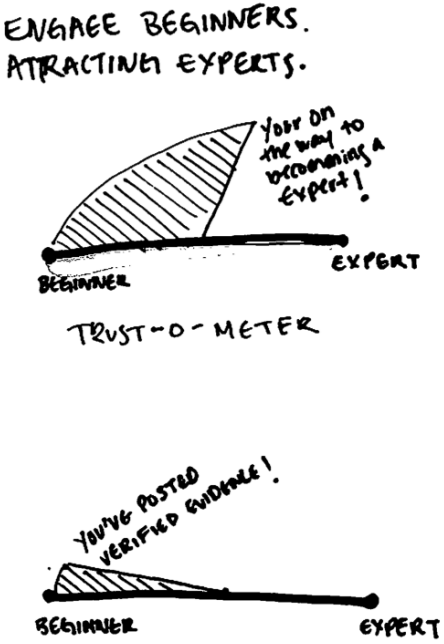
The Global Pulse system should support users when their offline as well. Connecting people in person will strengthen relationships and, in turn strengthen the Global Pulse community.

This can be achieved with matching volunteers with others that want to help in their community, interest area, skills, etc.

Concept Sketches



A feed of the user's activity on Global Pulse and out in the real world will illustrates their commitment to a cause to others, therefore gaining more trust.



Engaging new users by encouraging them to give the most useful evidence should be rewarded as hunches are verified in the system. The more trusted the evidence becomes, the more Global Pulse recognizes them as a expert.

Factors of Trust

- Considering the creator of the hunch to be trustworthy.
- Knowing of where the evidence came from.
- Understanding the validation process for evidence.
- Having access to the full process of how the hunch progressed.
- Knowing the process of how a hunch is evolved.

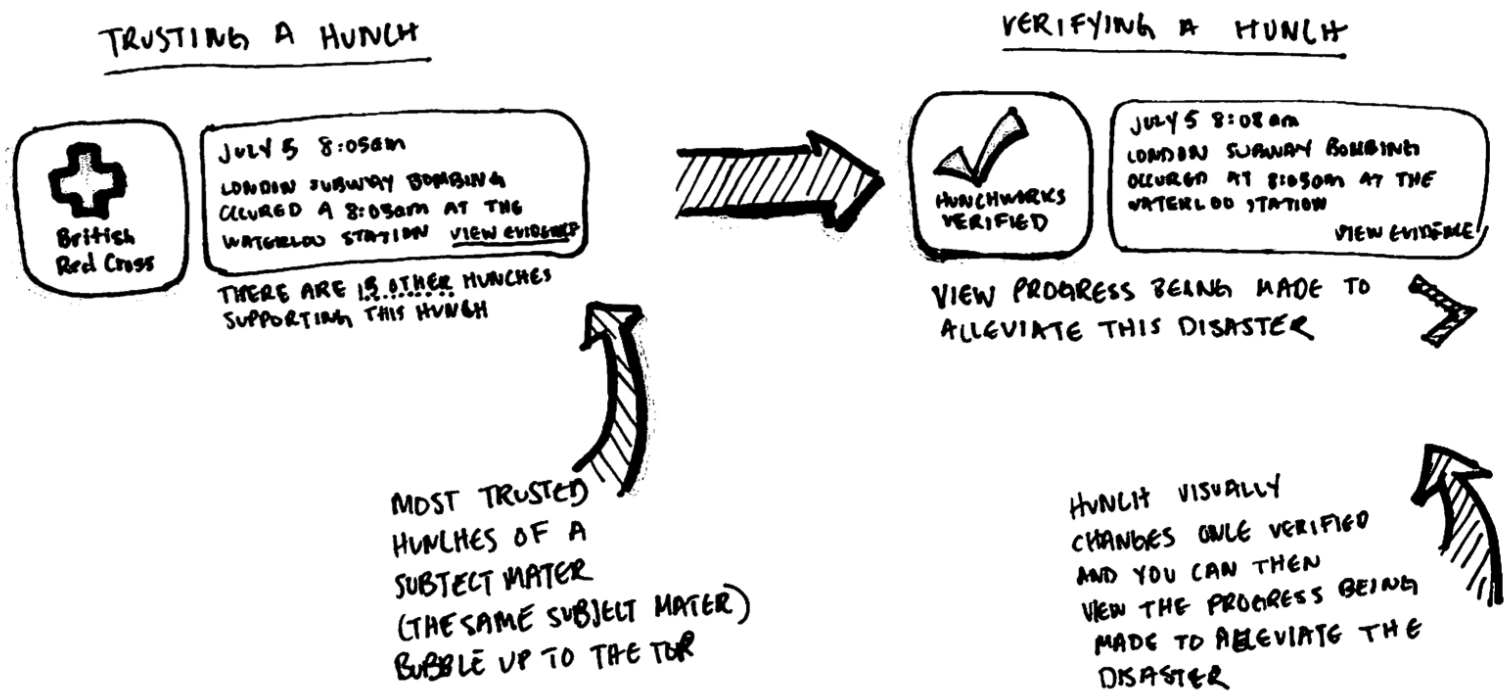
Interaction Flow

Andrew found a hunch that had been marked as verified, but was unsure what that actually meant. The hunch was created and advanced through the process by people unknown to her, so he is a weary to believe it out of hand.

Andrew views the hunch in detail and is able to see the details of the verification process. He sees how the verification of the hunch, its evidence and expert accounts happened and by whom.

Additionally, Andrew was able to view the entire history of the hunch, from inception to edits to its completion. The history shows logs of discussions, members who participated and a full record of the evidence submitted. This gives Andrew the material necessary for him to feel confident with eventual outcome.

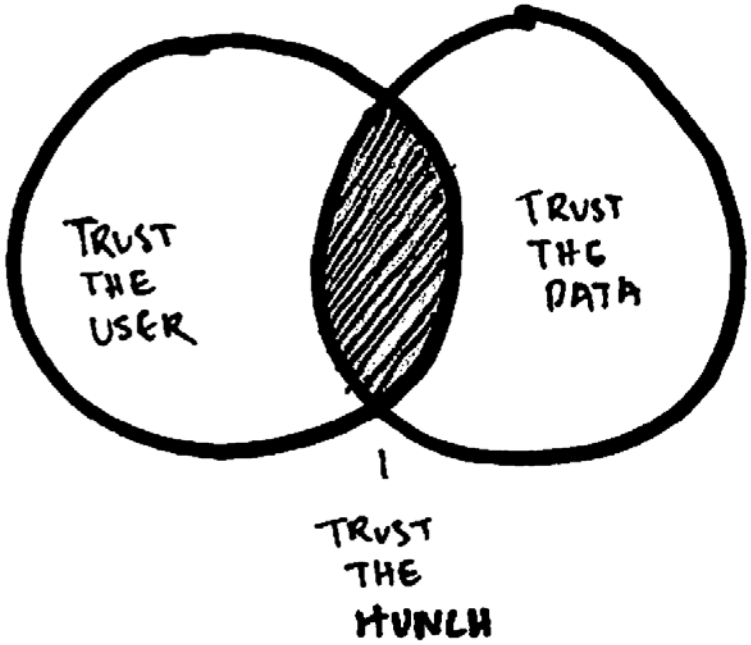
Concept Sketches

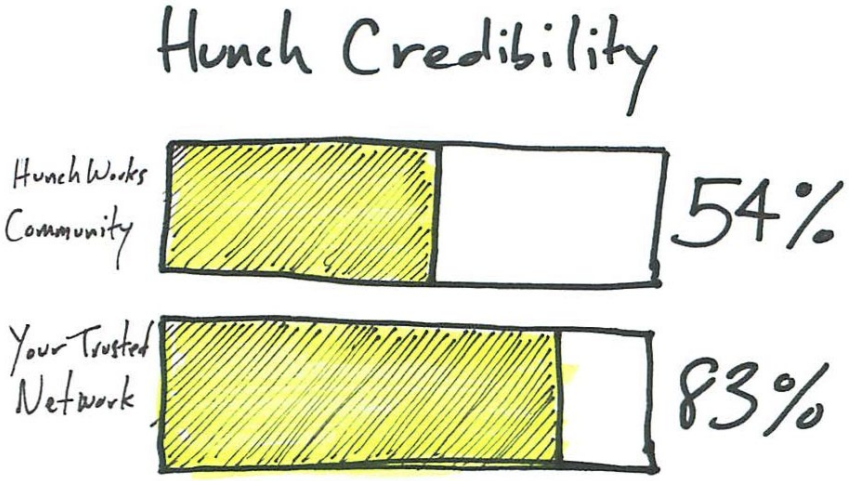


When a new hunch is created there might be duplicates of the same type of hunch. In this case, the most trusted user or group hunch should bubble up to the top.

Once a trust graduates to being verified, the visualization should reflect this transition. From there users can click through to see how this disaster is being managed. In order to trust the system, users must feel like something is being done once a hunch is verified.

Concept Sketches





There are many factors that will need to be met in order for a hunch to have credibility. However, the key factors will be for people to trust the users working on the hunch and the evidence/data that is being used to support the hunch. Therefore, it will be essential to continually display metrics for trust and credibility for both the users and evidence associated with a hunch.

Especially in the early stages of a hunch's formation, its credibility will likely be very subjective. In this phase, trust will be vital for users to commit time and effort to moving it forward. If the people you trust believe the hunch is credible, it will be more likely you will give it more credence. However, it is equally important to see what the community at large thinks to avoid an echo chamber effect.

Appendix

Notes

- How much personal information is absolutely necessary to share in order to establish trust among others?
- Vouching for someone should mean something. A way to establish value is to limit the number of vouches someone can give.
- Trust and verification very different, needs to be explicitly indicated as such
- Trusting a group is different than trusting an individual.
- Who owns the data for each instance of HunchWorks? How can people trust that it will not be used without their knowledge of against them? Should instances be verified by a central organization?

Notes (cont.)

- How can trust be "imported" from other networks? Having 100,000 Twitter followers could establish a level of validity among certain people.
- There likely needs to be a range of verification rather than a binary demarcation. Verification will also be subjective.
- A hunch's credibility score may ultimately be its verification score as well.
- EVE Online has a very interesting model for educating new players in the system, its game mechanics and culture. There are whole guilds that are dedicated to teaching new players how to succeed.

Thank You

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