

Workshop report: Designing an Interface ReTooling Local Care when International Humanitarian Organisations Exit

Knowing the ‘unknown unknown’

HUD, 25.10.2025

Executive summary

- This document is a combination of slides from the workshop held at EPFL on 25.11.2025 to sense check the continuity of care project track of HUD, and outputs created from the collated post-it note approach from each section.
- Attending were: Louis Potter (Facilitator, HUD), Rachel Howell (HUD), Anna Leander (HUD), Edgard David Rincón Quijano (HUD), Son Pham-Ba (IT4Research), Fabrice Laupert (ICRC), Aida Mengistu (OCHA), Silke Oldenburg (HUD). Klaus Schonenberger (EPFL) joined briefly at the start of the workshop.

Aim for today

- To test assumptions and align the direction of the Continuity of Care project with a range of stakeholders from different backgrounds and areas of expertise towards a shared vision of a technology platform that improves two-way information flows between HQ and the field.
- An accelerated NOW, WOW, HOW, focused on sense-checking and improving **tangible ideas**.
- Thinking inside the box, but questioning the box.

Agenda

Time	Session
0900-0920	<i>Welcome and introductions</i>
0920-0930	<i>Overview of the method</i>
0930-1015	<i>NOW: Where are we now? Are we in principle agreement in terms of the conclusions drawn and direction of the project? What might we be missing?</i>
1015-1025	<i>Break</i>
1025-1110	<i>WOW: Where do we want to get to? In an ideal world, what would the situation look like? Some blue sky thinking about how our identified obstacles could be overcome.</i>
1110-1155	<i>HOW: How do we get there? Practically, how might we implement a project plan towards the goals outlined in the WOW?</i>
1155-1200	<i>Wrap-up</i>

PROCESS FROM NEEDS TO SOLUTIONS

INITIATION

Framing the challenge, performing user research, analyzing insights and defining objectives.

1. Frame
2. Research
3. Analyze

DEVELOPMENT

Generating and screening ideas, creating and testing concepts and prototypes.

4. Ideate
5. Prototype
6. Test

IMPLEMENTATION

Detail design and implementation of solutions in the field, scaling up and diffusion.

7. Pilot
8. Plan
9. Diffuse

NOW/WOW/HOW

WORKSHOP GUIDE

A workshop method for collaborative innovation.



1. **NOW:** What's the current situation?
2. **WOW:** Where would we like to get to?
3. **HOW:** How do we get from the NOW to the WOW?

RULES OF THE GAME

PLAY THE GAME

Being present in the moment and actively taking part is critical to a successful workshop. In innovative work, no one has the right answer, so everyone needs to contribute. Even if it feels confusing at times, even if it feels like it's all talk and no action, even if you feel like you've heard it all before, even if it feels like everyone else's (or your own) ideas are crap. Trust the process.

KEEP TO TOPIC

The workshop is somewhat like a collective braindump. However, it is a braindump about a specific topic. If you feel that the conversation is going off-topic but that the conversation is still relevant in another setting, write a post-it note and put it in the "parking lot" for later. This means that, yes, we need to attend to this issue, but let's find a better time and place for it. It will be in the notes, so you won't forget about it.

SUSPEND JUDGEMENT

At this stage, we believe in quantity before quality. One of the most common mistakes of creative workshops is that people try their best to look smart. So you sit there with your single post-it, trying to come up with the best solution, the idea that will beat everyone else's idea. Don't judge your ideas too hard this early on. There will be a time for evaluation, but right now we just want to get things on the table. Something that you think is absolutely crazy and impossible might trigger the imagination of someone else in the room.

UTILIZE DIVERSITY

We are all experts in our own domains, but don't just sit back and listen to each other. Don't take things for granted. Even if you feel out of your element, ask questions, voice your opinion, share your needs, challenges and solution proposals. In innovation, diversity of opinion and perspective is critical. We do not seek consensus, we seek a deeper understanding. Don't worry if you don't agree, that's all good and normal.

**NOW: What's the current
situation?**

The challenge as we see it

The obstacle to better connections between the field and HQ: Interacting systems with different knowledge levels and different interests

- Local staff don't know what's out there (a unknown unknown) i.e. better medical technology, better overall guidelines, better infrastructure etc.
- International Humanitarian Organisations (IHOs) don't know **who** to consult or **what** to consult on, before it's too late (a unknown unknown) i.e. IHO consulted this MoH representatives from MoH on the ground situation, when they should have been talking to this local organiser instead.

The reason the situation does not improve is because we want (and have time to) respond to the immediate in front of us.

Example:

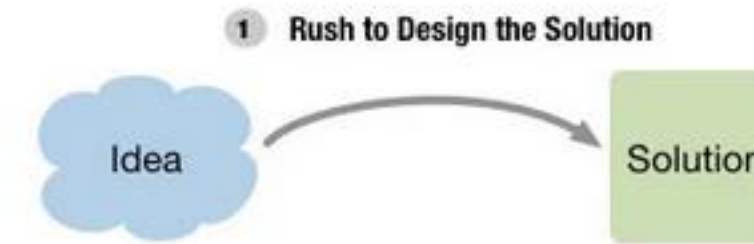
Tell a local staff, there's a better ultrasound, they'll want it.

Tell an IHO there's a need for surgery, they'll want to provide it.

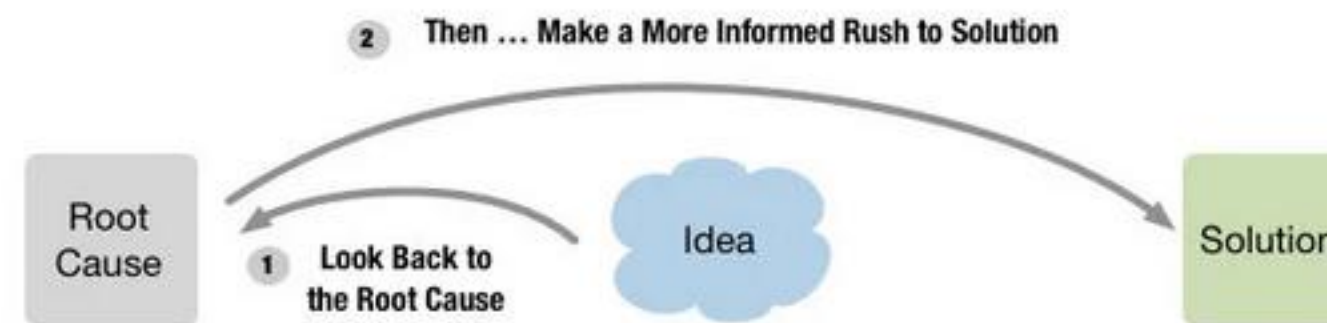
It is in our nature to respond to the known unknown, not the **unknown unknown**.

Investing in a Deeper Understanding of a Harder Problem

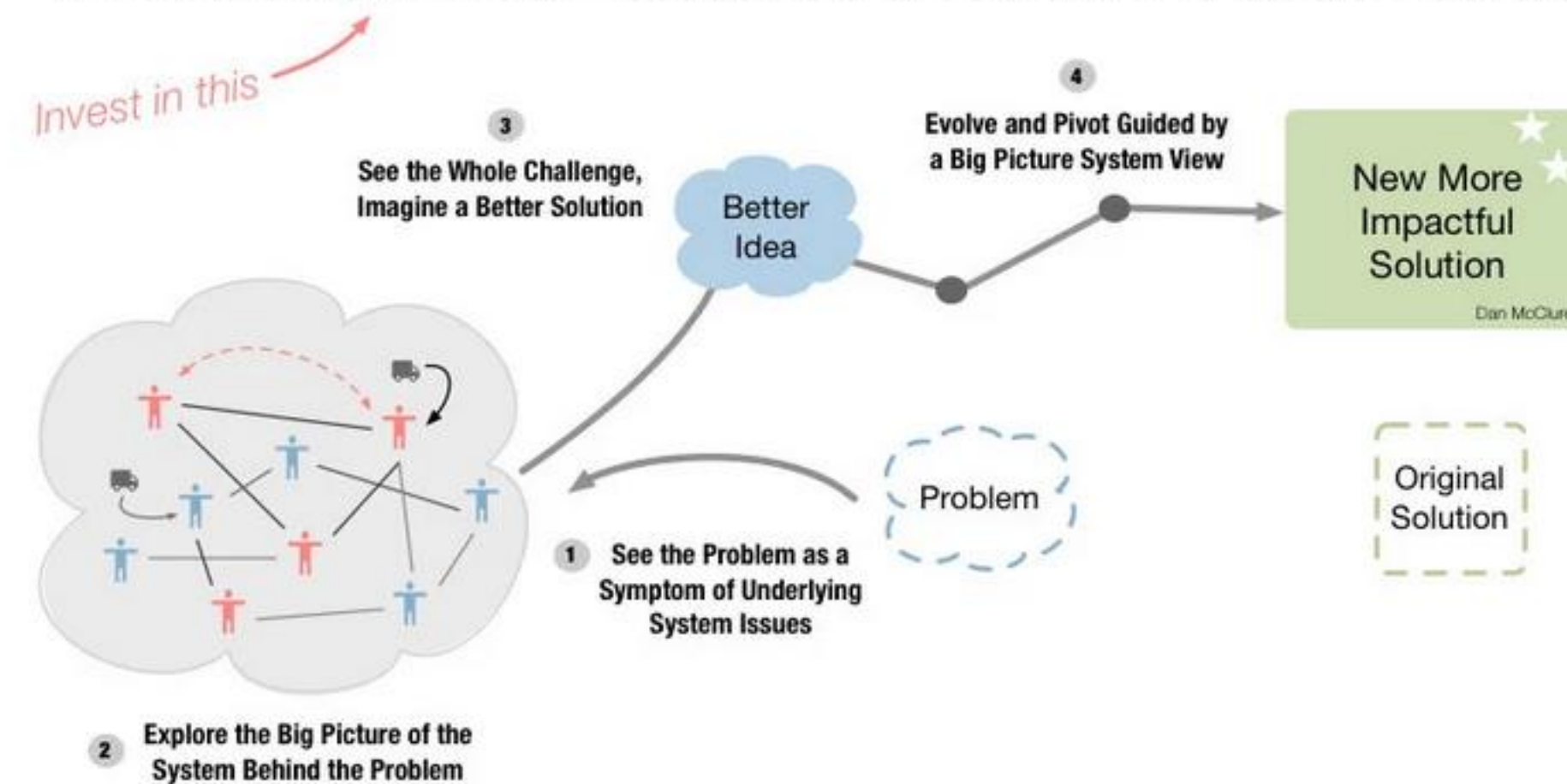
#1 The Conventional Path - Rush to Solutions



#2 A Better Option - Look Back at the Specific Root Cause



#3 A Fundamental Shift - Understand the System Behind the Problem

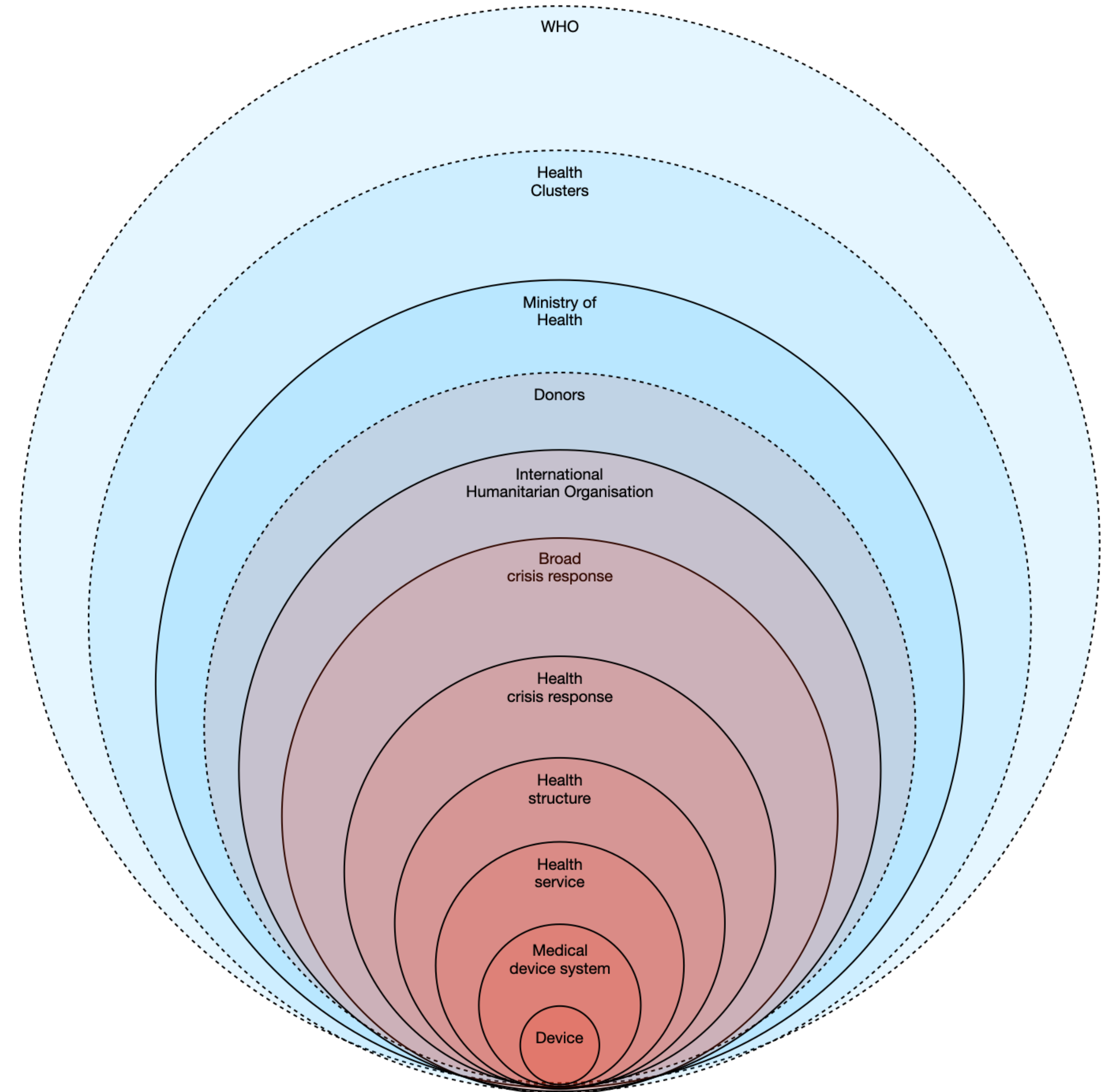


Identifying the 'unknown unknown'

System design to think about problems in different ways.

Asking “but, why?”

- Connecting specialists in silos to other resources / products / actors outside of the silos is not well done. “Did you know that this person is doing something similar but in this context”, “Did you think about whether having a solar fridge would be a better solution than a cold box”.
- You need a combination of broad information and understanding in order to work upstream and understand the root cause of a problem i.e. you need to know that D is caused by C, which is caused by B, which is caused by A.



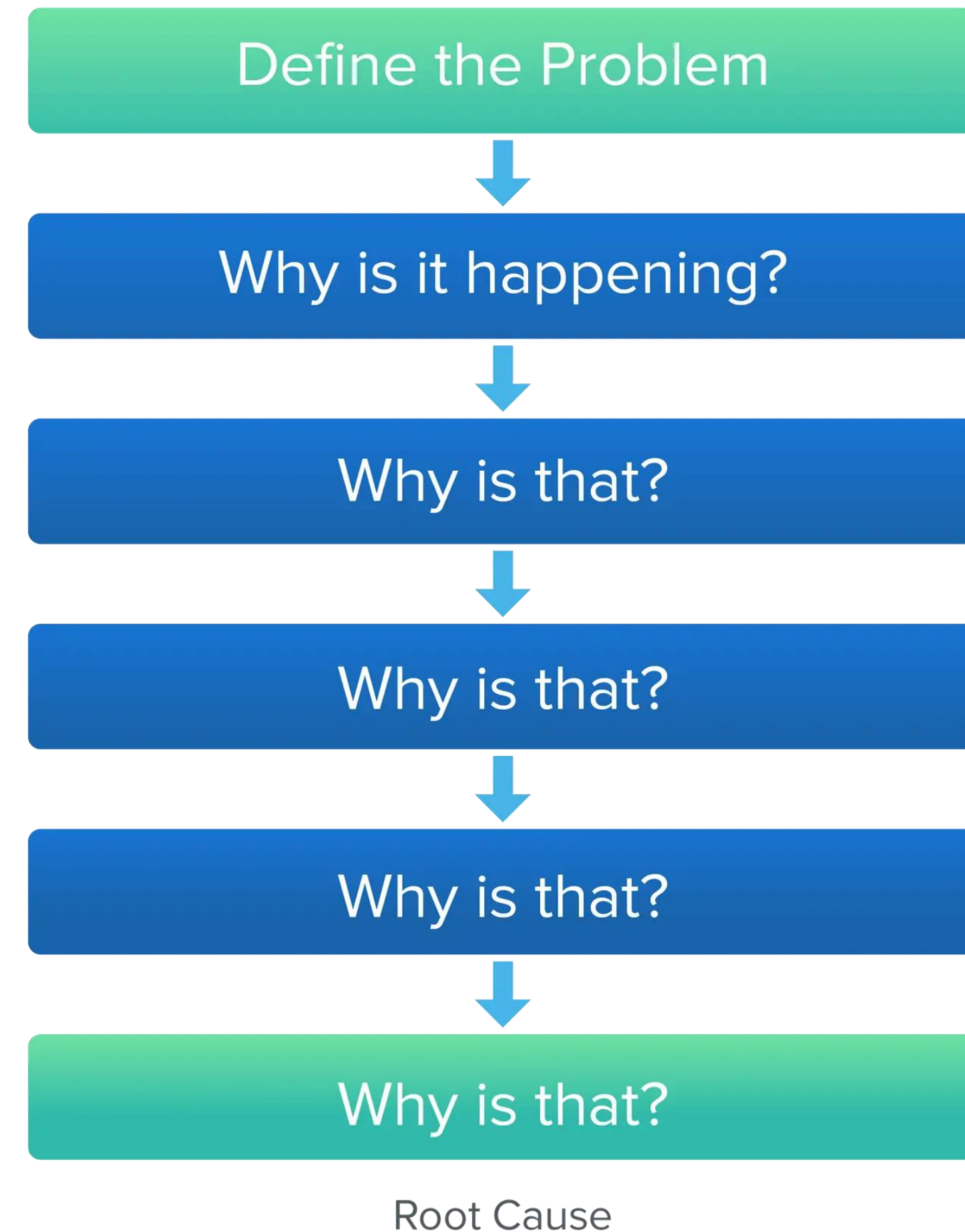
Example

Medical device graveyard: asking “but, why?”

- Medical device failure is caused by a lack of maintenance;
- lack of maintenance is caused by poor contracting;
- which is caused by poor device selection;
- which is caused by a lack of knowledge of the local context.

For the end user, there is little reason for them to know the unknown unknown here. I want someone/something to do my job for me...

The 5 Whys



Time to split into groups:

Group 1 (HQ): Fabrice, Anna, Son, Aida

Group 2 ('the field'): Rachel, Silke, David

Exercise: 0945-1015

NOW: What is the current situation?

- Thinking in terms of the challenges faced in connecting the local to the international in humanitarian settings (with a focus on health), where do you see the main challenges?
- Think individually. One idea per post-it. (5 mins)
- Discuss in you groups and consolidate from the team field or HQ perspective. (15 mins)
- One person to report back to the room. (5 mins each)

NOW: Output – collated by theme

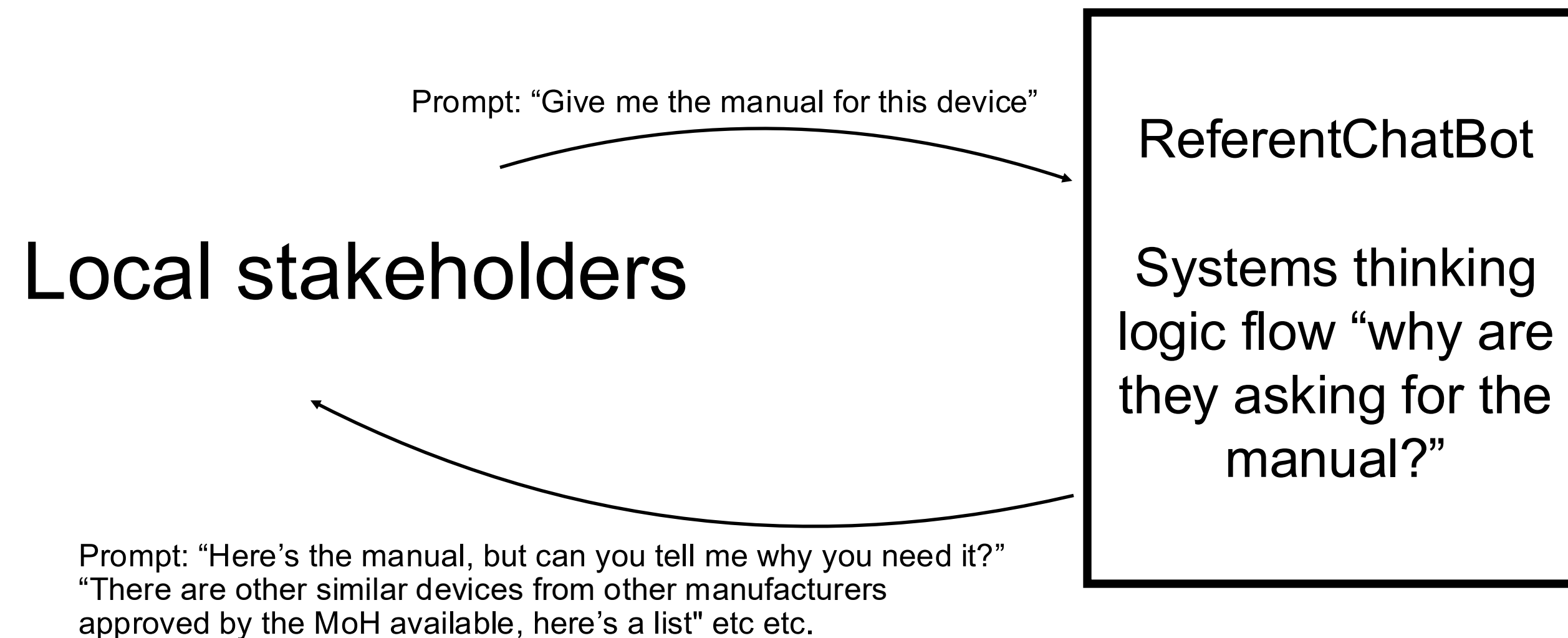
Theme	Local Context team	Headquarters	Facilitator
<i>Communication, language & feedback loops</i>	<ul style="list-style-type: none"> Reporting software is a third-party, generating negotiation and misunderstanding. Information in different languages when there is an influx of migrants. 	<ul style="list-style-type: none"> Unknown how to inform local teams. Language barrier. Communication means are lacking. I don't receive actionable feedback from the field. 	
<i>Information, training & knowledge (guidelines, tech, data)</i>	<ul style="list-style-type: none"> Technical information is limited on tech. Lack of training on medical device operations management. Access to guidelines, local and national. Inequity on data treatment. 	<ul style="list-style-type: none"> How to know better options exist. Difference in knowledge or education about new technology. 	
<i>Technology, connectivity & equipment</i>	<ul style="list-style-type: none"> There are some places without connectivity, so the health brigade cannot get reports uploaded. No equipment. The selection of health equipment does not fit the maintainable capabilities of institutions. 	<ul style="list-style-type: none"> Electricity or connectivity. Graveyard of medical equipment. 	
<i>Governance, regulation & bureaucracy</i>	<ul style="list-style-type: none"> Institutional articulators are weak. Volatile public administration / rotation. Lack of information on how to manage bureaucratic procedures in Colombia. Lack of information available on resources available to the Ministry of Health. 	<ul style="list-style-type: none"> Legal risks and accountability. Local regulations. 	<ul style="list-style-type: none"> HQ is balancing layers of bureaucracy to avoid mistrust.
<i>Capacity, staffing, time & expertise</i>	<ul style="list-style-type: none"> High rotation of people in the process. 	<ul style="list-style-type: none"> My solutions require support / change management. Lack of personnel on both sides. They don't have the time to adapt to new ways of working. The lack of capacity in local contexts. 	<ul style="list-style-type: none"> Time to respond to all requests is limited at HQ. HQ specialisation of the experts increases, making it harder for generalists to exist.
<i>Social dynamics, trust & stakeholder relationships</i>	<ul style="list-style-type: none"> Jealousy / salary / access. Cultural / social stereotypes. Not knowing the context. Call for participation. 	<ul style="list-style-type: none"> My solutions are not adapted for field needs. I cannot influence the behavior in the field. The spaghetti bowl model of engagement. Lack of ways to deal with local stakeholders. 	
<i>Resources, finance & donors</i>	<ul style="list-style-type: none"> Financial limitations. 		<ul style="list-style-type: none"> Donor decision making influences HQ decisions.
<i>Service access & entitlements</i>	<ul style="list-style-type: none"> Access to Colombia public health system. 		

**WOW: Where would we like to get
to?**

Enter... tools we think might help?

Step 1

Users ask for their known unknown

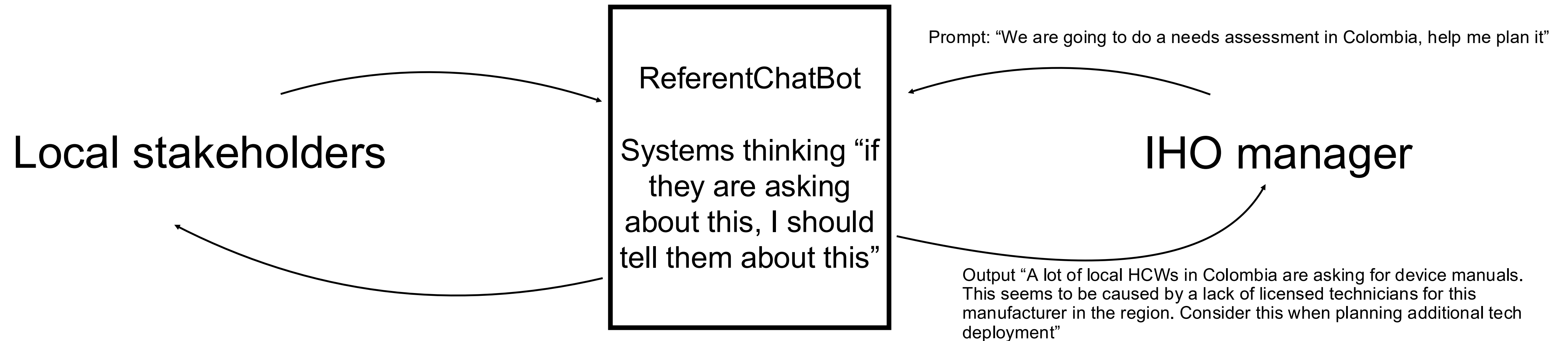


Through a '5 whys' style logic narrowing, the chatbot informs and directs users to the root cause of the issue.

The incentive: users get the resources they were requesting, **plus** a 'consultation' on what the root cause might be and how to fix it (the unknown unknown).

Step 2

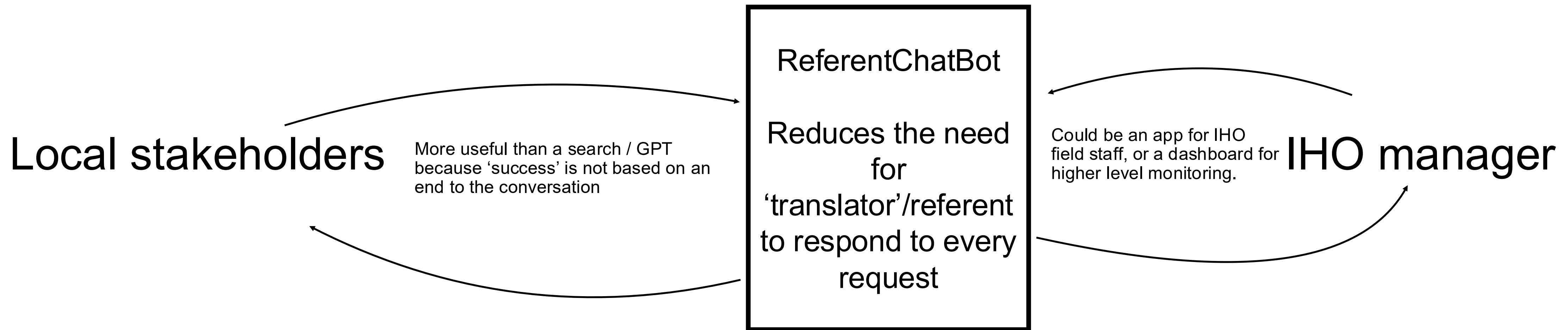
Knowing the unknown unknown is valuable on both sides



The incentive: knowing what is being asked on the ground is a good indicator of needs, **especially** if the people are being challenged on what they are asking.

Step 3

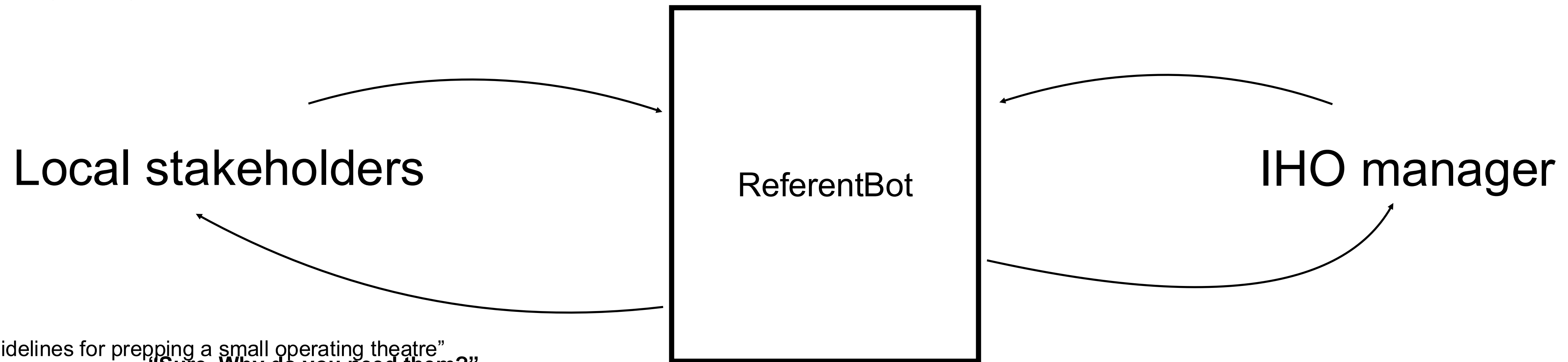
Constant connection / translating information flows at both ends



The incentive: it's **mutually beneficial to both sides**, providing answers to better questions and sharing knowledge without taking up time and resources

An example

Surgery Infection Prevention and Control



“Give me the guidelines for prepping a small operating theatre”
“**Sure. Why do you need them?**”

“We’re seeing an increase hospital acquired infections”
“**Why?**”

“We think there is a lack of trained staff in the structure”
“**What about the room itself? Does it have good positive pressure ventilation and are you following the IPC protocols?**”

“There’s no positive pressure system”
“**Ok, let’s look into that too. What are your constraints?**”

“Low funding availability for OT repairs”
“**In that case, have you heard of surgibox? It’s designed for surgery in places without dedicated OTs**”

“No, I haven’t. Where do start?”
“**Here’s a link to the product page and an overview of how it works**”

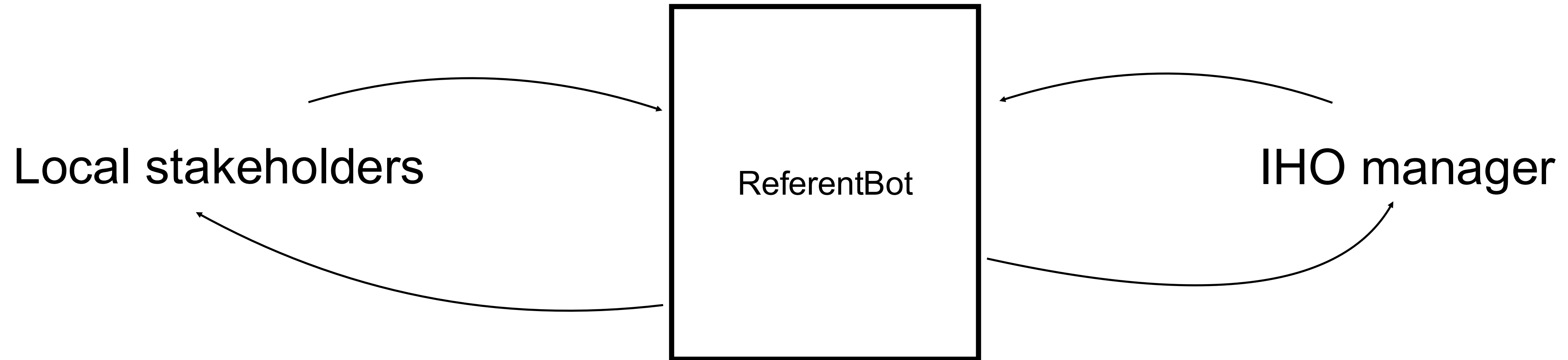
“I got a request from X on how to improve their OT. What’s happening?”
“**There were recently a number of requests for simpering IPC practices. It seems this might be an issue with the ventilation and design of the OT. I proposed they consider SurgiBox.**”

“Ok, tell me about SurgiBox. Also, help me prepare a sizing tool for a ventilation system in X”
“**Here you go. I’ve adapted it to the local context needs and filled out the part I already know about.**”

“Ok, help me plan my visit...”

Another example

Malnutrition



“Give me the guidelines for treating acute malnutrition”

“Sure. What do you think the cause is?”

“Poor harvest”

“Why?”

“There was a drought”

“What about the irrigation system?”

“The irrigation system is not working”

“What kind of crops were you growing?”

“The crops are not suitable for this heat”

“What about this other type of crop?”

“Local farmers do not have training in this”

“Here’s a training on suitable crops for your region”

“Help me plan a needs assessment in location X”

“Sure. There were recently a number of requests for support on treating malnutrition. This seems to be caused by a drought that has decimated crops. It seems the local crops are not well suited to warming climate”

“Ok, let’s include a agricultural capacity component in the assessment. Who should we talk to?”

“FAO would be good for this.”

“Ok, help me get in contact with them and include their needs assessment materials in the survey”

“Here’s a an updated needs assessment approach with suggestions for local stakeholders that were asking about where to find training materials. ”

Where this could be useful

At a local level:

- Helping users identify root causes of problems
- Signposting existing solutions / resources
- Overall capacity building and improvement

At the IHO level:

- Baseline data stream from a context before, during and after intervention.
- Helps identify true needs i.e. during the proposal stage and planning needs assessment.
- Helps plan what to bring to solve the less obvious upstream problems.
- Improves the handover from the start by laying out the basic parameters within which a project should be built.

Exercise: 1040-1110

WOW: Where do we want to get to?

- Do you agree with this general concept? What features would it have in an ideal world? Do you have another idea?
- Think individually. One idea per post-it. (5 mins)
- Discuss in your groups and consolidate from the team field or HQ perspective. (15 mins)
- One (different) person to report back to the room. (5 mins each)

W O W

Describe my set-up
Facilitator feedback and
improvement suggestions
FIELD

I can ask for
stats about
issues mentioned
in specific areas
Aggregation
group by similarity
location, category

I engage with
the facilitator to describe
my solution
if give feedback
on possible issues &
limitations

The system divides
the thinking process,
and the thinking
facilitator

I describe my
situation, it asks
questions, to be
able to generate
it in the field

But service should
identify best contact
point

Voice communication
(field)

Link with other
HQ members



Cross
Context
Facilitation

* Easing the
reporting
burden

Removing
language
barriers

Capturing
best practices
- connect
similar
contexts

* Risk of
accelerated
power dynamics
→ not allowing
space for local
solutions

HQ
- Improves
trust
on both
levels

TRUST
+
EFFICIENCY

Tech Features

Voice to
text

Query
Modes
per user

upload photos,
documents,
etc
(also translate
as needed)

Smart phone
app with
some offline
functionality

Can ask
questions to
me chat but
when I ~~ask~~
have network
(saves questions
& provides response
later)

Confidence

trust
→ relations

Co-designed
interface
→ equality

Perhaps Pedagogies
for
Confidence
in
Analysis
process and
Outcomes.

Interface

Interface
Similar to
chat GPT or
Google → simply
type in question
& get a response

effectiveness

- technical
Assessment
of
Technological
Features Assistance.

Program of
features covered
& local
realities
+ not generic

contact
local HQ
staff → chat
outside to
chat with
HQ (through
WhatsApp)

Contact
point
to check
information

Alerts

- Institutional
Conflict
Alerts
on TOR

- Timeframe
Validation
of the
Solution
vs. Risk Management.

update

Save question
history →
app provides
recommendations
of topics based
on my history

Module
updates
to check
on locals
Need feeding
is updated

Security

- Political
conflict
declaration

WOW: Output – collated by theme

Theme	Headquarters	Field context	Facilitator
<i>Interaction, access & multimodal input</i>	<ul style="list-style-type: none"> • Chatbot / service should identify best contact point. • Voice communication to the field. • I describe my situation. It asks a question to be able to promote it in the field. • I engage with the chatbot to describe my solution. I give feedback on possible issues and limitations. • Describe my setup and receive feedback and improvement suggestions. 	<ul style="list-style-type: none"> • Voice-to-text. • Query modes per user. • Upload photos or documents, etc. • Smartphone app with some offline functionalities. • Can ask questions to the chatbot when I don't have network. • Interface similar to ChatGPT or Google: simply type in a question and get a response. 	
<i>Language & accessibility</i>	<ul style="list-style-type: none"> • Overcoming language barriers. 	<ul style="list-style-type: none"> • Also translate as needed. 	
<i>Knowledge management, best practices & recommendations</i>	<ul style="list-style-type: none"> • Capturing best practices. • Aggregation by similarities across location and context. 	<ul style="list-style-type: none"> • Technical assessment of technological features assistance. • Should show some question history or app provides recommendations of topics based on my history. • Module to double-check on local's need feeding is updated. 	
<i>Cross-context linkage & organisational connections</i>	<ul style="list-style-type: none"> • Link with other HQ departments. • Connecting different contexts. 	<ul style="list-style-type: none"> • Local IHO staff chat from the app to HQ directly, maybe through WhatsApp. • Creates contact to check information. 	<ul style="list-style-type: none"> • Cross-context facilitation.
<i>Trust, participation & facilitative role</i>	<ul style="list-style-type: none"> • The system assists the thinking process, but does not do the thinking. It is a facilitator. 	<ul style="list-style-type: none"> • Increases trust and relationships between HQ and the field. • Co-design interface leads to better equality. • Participation leads to confidence in process and outcomes. 	<ul style="list-style-type: none"> • Improves trust on both levels. • All about trust and efficiency.
<i>Safeguards, conflict & risk management</i>		<ul style="list-style-type: none"> • Institutional conflict alerts. • Conflict of interest alerts on documentation. • Time frame validation of the solution versus risk management. • Declares political conflict in the region. 	
<i>Workload, reporting & efficiency</i>	<ul style="list-style-type: none"> • Easing the reporting burden. 		

HOW: How do we get there?

What we think would be needed: Work package approach?

- Package 1: designing a better chatbot and LLM for signposting tools and getting to root causes.
- Package 2: user research to understand the needs and scope.
- Package 3: analysing and presenting the data. Ongoing analysis of the prompts and queries.
- Package 4: context adaptation. Continuous learning and improvement.

Why we think this might be a good idea: Incentives for all stakeholders?

- Local stakeholders: asking the right questions for better problem solving and capacity building. (i.e. solving the immediate local challenges)
- IHOs: more useful information early on to improve efficiency, planning, and response.
- HUD: works on the 'connecting' level between IHO and LHS. User design research.
- EPFL: interesting standalone research on making chatbots and LLMs more useful for users / deep analysis of user interaction.

Exercise: 1125-1155

The HOW. We'll think about how the project could work in practice to get from the NOW to the WOW.

- Separate work packages:
 - Field work packages - *User testing. Understanding the needs. How could it work? What about incentives? What would need to be done?*
 - HQ work packages - *What does useful information look like? How could it be tested? Who needs to be involved? How might we incentivise IHOs to join?*
 - *Think individually. One idea per post-it. (5 mins)*
 - *Report in you groups and consolidate from the field or HQ perspective. (15 mins)*
 - *Report back to the room. (10 mins)*

H O W

Sustainable
business
models

Privacy?

Super
computing
time
1-2hr

Agentic
LLM
- EPEL
Support?

Participatory
Crowd
Source

JSEF
Profiling
+ tech use
+ situation
+ Journey
+ ...

Early
Adopter
Valida

Wireframing
Probe

Validation
user
testing.

Testing
protocols
for prototype

Prototype
construction

Pilot
MVP

Long
Term
iterations.

Have a
Feedback
loop

As H:
get synthesized info
about ~~the~~ issues
reported in the field

Allow for
local-local
interactions

* Contextual
information
→ donor /
project scope
→ ~~the~~ request

Interactive
Data bases for
on relevant
(Medifood etc.)

MEAD
from the
people
improving

gather relevant
documents, guidelines
conversations

Address Information
Copyrightability for
organizations

Process tool
the process
of ~~the~~ iterations.

Build a
Framework an LLM
capable of ~~understanding~~
local context and
culture

LLMs: identify
which should be
used

Have a system
for updating
learning.

Design needs
to include
local.

HOW: Output – collated by theme

Theme	Field context – Process	Headquarters – Enablers / requirements	Facilitator – Meta conditions
<i>End-to-end co-design & iterative development</i>	<ul style="list-style-type: none"> • Participatory crowdsource. • User profiling, tech use situation journey. • Early adopter validation. • Wireframing probe. • Validation user testing. • Testing protocols for prototypes. • Prototype construction. • Pilot MVP. • Long-term interactions. 	<ul style="list-style-type: none"> • Design needs to include local input. • Process tool that provides information and questions. • Have a system for updating. 	<ul style="list-style-type: none"> • Sustainable business model required.
<i>Feedback loops & interactions</i>	<ul style="list-style-type: none"> • Long-term interactions. 	<ul style="list-style-type: none"> • Have a feedback loop. • Get synthesized info about issues reported from the field. • Allow for local–local interactions. 	<ul style="list-style-type: none"> • All about trust and efficiency.
<i>Context, documents & knowledge base</i>		<ul style="list-style-type: none"> • Contextual information including donors, project cycles, and requirements. • Gather relevant documents, guidelines, conversations. • M&E reports from the field and other organizational documentation. • Alternative or other relevant tools (i.e. Meditron tool). 	
<i>LLM, infrastructure & technical backbone</i>		<ul style="list-style-type: none"> • Build and evaluate an LLM capable of understanding local context and culture. • LLMs identify which should be used (i.e. identify which LLMs should be used). • Have a system for updating. • Process tool that provides information and questions. 	<ul style="list-style-type: none"> • We have access to supercomputing time at ICAIN. • Appletus LLM from EPFL could provide support.
<i>Governance, privacy & confidentiality</i>		<ul style="list-style-type: none"> • Address information confidentiality by organization. 	<ul style="list-style-type: none"> • Privacy is essential.

Parking lot post-its

- Does this system just increase reporting requirements?
- Does the system make the relationship more top-down?
- Risks based on how the LLM is trained.
- How can the LLM understand the context?

