

Skills-Building Masterclass



HCD EXCHANGE



Embedding HCD in Public Health

Wednesday, March 27, 2024

4PM EAT / 6:30PM IST / 1PM GMT / 8AM EST

Who We Are

The HCDEExchange is a knowledge hub driving locally-led human-centered design and public health (HCD+Public Health) in Africa and Asia.

We do this by increasing access to and use of HCD resources, knowledge, expertise and opportunities in public health programming.



HCD EXCHANGE



circle
innovation

The HCDEExchange is part of JSI



Meet The Speakers



Karina Fassbender
Founder & Managing Director



Nzisa Kioko
Sr Design & Innovation
Strategist



Munya Joel Chinguwa
Senior HCD Designer



About Circle Innovation

Circle Innovation is an **innovation catalyst** that focuses on **helping ideas grow through human-centered design, research and innovation process facilitation**. We work with entrepreneurs and intrapreneurs to support them in the process from an idea to piloting of solutions with research, processes and tools. We do this through quantitative and qualitative research, human-centered design, workshops and trainings, co-creation, startup programs and innovation project management.



About the Session

Today, we will showcase how you can apply HCD principles and tools in public health, by working on a real case study.



Learning Objectives

After the session today you will:

- Have an in-depth understanding of the HCD process, frameworks and tools
- Understand how HCD can be applied to public health design and programming
- Have applied HCD to solve a real public health case study & design challenge



Let's Start - Context Setting

The **case study is focused** on supporting a large African healthcare non-profit organization to **design a leadership programme on public health emergency preparedness and response** for public health leaders in **10 African countries**.

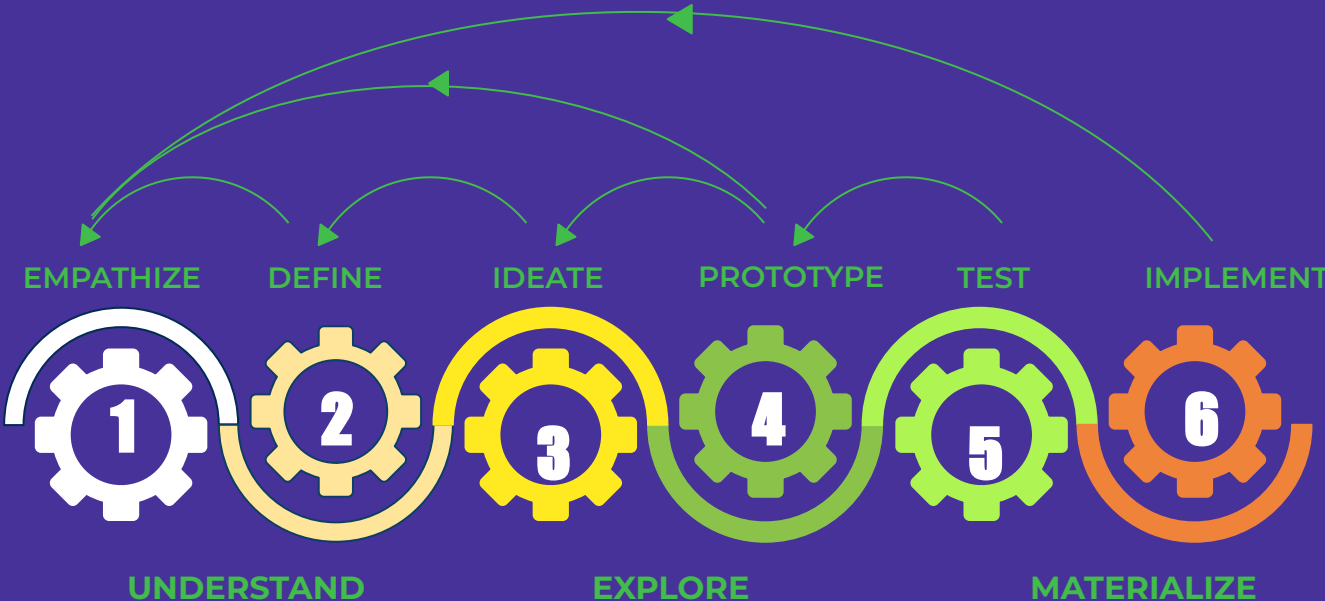


Design Challenge

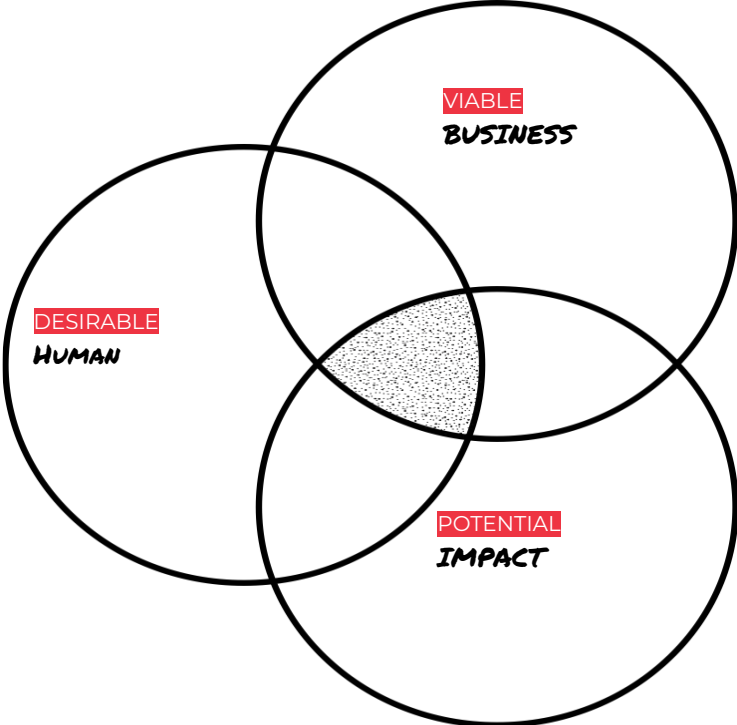
How Might We prepare **public health leaders** and other key stakeholders from African countries **to manage public health emergencies?**



The Framework



The Framework



Activity: Problem Exploration

How would you start to better understand the design challenge?

How Might We prepare **public health leaders** and other key stakeholders from African countries to **manage public health emergencies**?

5 minutes



Problem Exploration

How do we explore the problem?

Think about the existing problem

- What do we know about the different elements in the design challenge?
- What do we not know?
- Who has the problem?
- What is the specific context of the problem?
- What are your assumptions?
- The focus here is to understand the problem in-depth!



Case Study Example Step 1: Problem Exploration

What we did:

- In-depth desktop research
- Key stakeholder mapping
- Stakeholder alignment workshop

What we learnt:

The key problems identified were:

- Leadership gaps and vulnerability are weaknesses in health systems that are disrupted by emergencies and weak coordination within the countries and across neighbor states
- Inadequate mechanism for communication and sharing experiences
 - Duplication in the communication committees → need for clearer roles and responsibilities
- Preparedness and response are very complex and different issues:
 - The kind of levels of leadership and people that need to be involved in response is different from preparedness
- Weak systems across the board but systems, resources and capacities differ between countries



Questions and Answers

Poll: How Did You Find Out About This Masterclass?

Activity: Design Research



ACTIVITIES

What is happening and what are people doing?



ENVIRONMENT

Where is the action taking place? What is the context?



INTERACTIONS

How are people engaging with each other? With objects? With their surroundings?



OBJECTS

What things are important? What role do the things play?



U - THE PEOPLE

Who is involved? What roles do they play? What matters to them?



Activity: Design Research

Prompt:

- How would you conduct design research with relevant stakeholders across the 10 countries?
- What research activities would you undertake?
- Who would you talk to?
- What key questions would you ask?

Time: 7 minutes

Challenge: How Might We prepare **public health leaders** and other key stakeholders from African countries to **manage public health emergencies?**



Group Shareback: What would design research look like for you?



Case Study Example Step 2: Design Research

- We conducted 32 remote design research interviews with a wide range of target participant including, PHEPR experts and Amref experts. Below is an overview of the people we got to interview and co-create with:
 - 18 Public Health Officials
 - 12 PHEPR experts
 - 2 Amref PHEPR experts
- We investigated their needs and challenges around leadership and management of public health emergencies, gaps in their current training opportunities and learning preferences.
- We came up with an opportunity question: **HMW design an engaging leadership program to prepare and connect public health leaders from African countries to better manage public health emergencies within and across countries?**



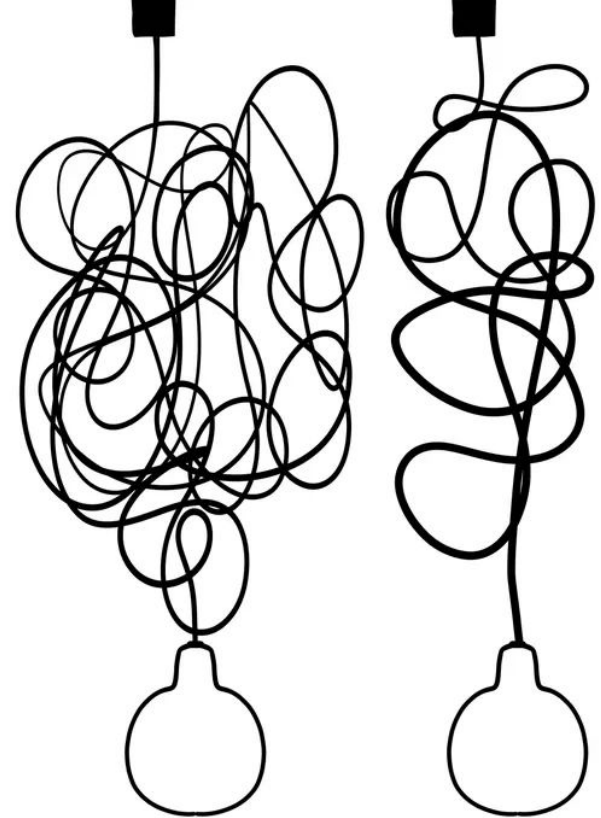
Ideation

Coming up with lots of ideas to explore options for solving a problem.

Brainstorming - The goal isn't a perfect idea, it's lots of ideas, collaboration, and openness to wild solutions

How to brainstorm

- Defer judgement
- Encourage wild ideas
- Build on ideas of others
- Stay focussed on the topic
- One conversation at a time
- Be visual
- Go for quantity



Prototyping

Prototyping is about making your ideas **tangible** and **testable**.

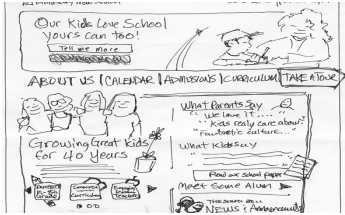
It's about showing your ideas to people, not just telling them about them.

Why prototype?

- Helps us transform an idea in our head into something that people can see & interact with
- Helps us to learn more about:
 - the problem we're trying to solve
 - the people we're designing for
 - the different elements of our idea
- Helps us to explore elements of innovation:
 - Feasibility
 - Desirability
 - Viability



Methods of Low-Fi Prototyping



Sketches

Illustrating ideas with pen and paper



Paper Prototyping

Use paper and other art supplies to flesh out the different elements of the idea



Digital Wireframing

Using apps such as Figma and Balsamiq to illustrate the visual and interactive elements of an App or Website



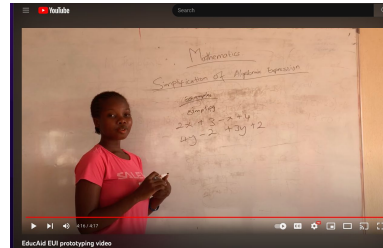
Role Play

It entails acting out the idea



Mockups

Static digital prototypes with more details and visuals



Video/Audio

Pre-recorded video or audio message



Activity: Ideation & Prototyping

Prompt:

- In the first three minutes, come up with as many ideas as possible for our HMW
- In the next seven minutes, build out your idea: sketch - storyboard - roleplay - go crazy!

Refined HMW Statement:

- HMW design an engaging leadership program to prepare and connect public health leaders from African countries to better manage public health emergencies within and across countries?

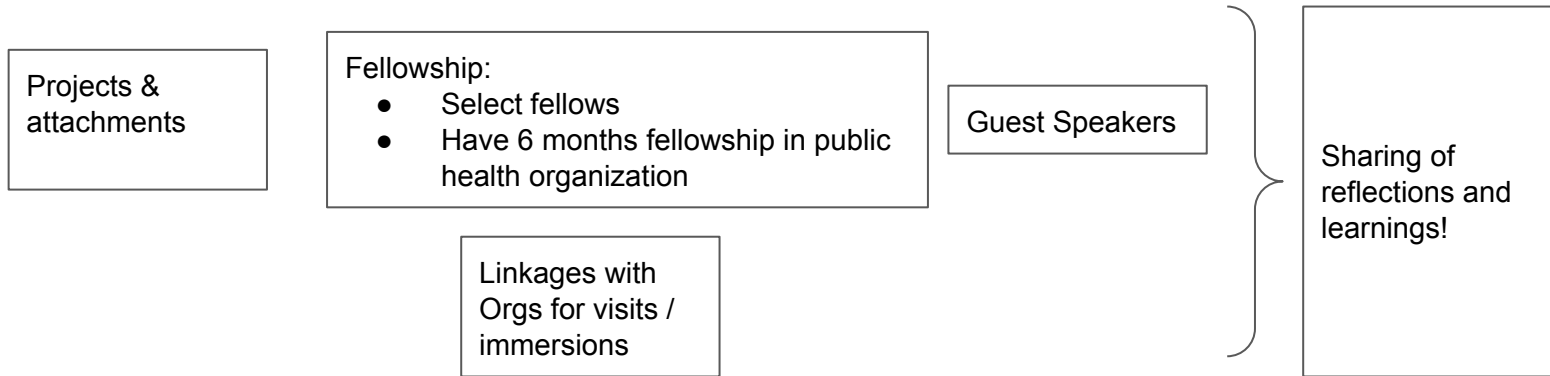
Time: 10 minutes



Ideas Group 3

- Leadership program as capacity building: train public health leaders on leadership
 - Have a curriculum that they can follow when they're trained
- Trainers:
 - Experts and researchers from universities
 - Experienced public health leaders
- How are we training them?
- Organize a fellowship, listen to the ideas of the people who are already there
 - Can pick some leaders from that group who can lead others
 - Can give us ideas about the organizations and people they are inspired by
- Develop the curriculum

How would you prototype that?



Case Study Example Step 3 & 4: Ideation & Prototyping

1 Co-Creation

During ideation, we **co-created ideas** with a wide range of stakeholders, including:

- Public health leaders in Africa (as part of the design research)
- International public health experts
- Adult learning experts
- Subject-matter experts on specific topics

2 Prototyping

We prototyped the different elements of the leadership program:

- The curriculum and content (led by subject-matter experts)
- The format of content displayed on the online platform (text, audio, video)
- Self-assessments (quizzes and case studies)
- Networking and connections (online and offline)



Case Study Example Step 3 & 4: Ideation & Prototyping

Prototype 3: Content Type Text, Images & Infographics

Description: Learning Content Delivery via text, images and infographics

The screenshot shows a learning unit page with the following elements:

- Header: "Welcome to Unit 1: History of Prior Public Health Emergencies" and "13 INTRODUCTION".
- Main text: "This Unit describes the History of some prior public health emergencies (1546-2021) including COVID-19. It further provides grounding on how international and local laws relating to health and the goals that are attained in passing these laws and relevant policies. The Unit helps you reflect on health care related laws in your community, country or international arena that govern PHE."
- Image: A photograph of a modern building.
- Call-to-action buttons: "This Unit takes 1 hour to complete.", "Do you have any questions? Click here to chat with the Q&A Bot.", "Do you need support? Click here to connect with an agent.", "0% complete 60".

Prototype 4: Content Type Audio Clip

Description: Learning Content Delivery via audio clip

The screenshot shows an audio player interface with the following elements:

- Header: "Welcome to Unit 1: History of Prior Public Health Emergencies" and "14 Health Care Laws".
- Text: "You can listen to this section here:" followed by a play button icon.
- Call-to-action buttons: "Click here to view the transcript of the audio recording.", "Do you have any questions? Click here to chat with the Q&A Bot."

Prototype 8: Video Clip

Description: Video presentation of unit 2.

The screenshot shows a video player interface with the following elements:

- Header: "This unit takes 1 hour to complete.", "Do you need support? Click here to connect with an agent.", "Click here to view the transcript of the audio recording."
- Video player: A large black rectangle with a white play button icon in the center.
- Call-to-action buttons: "Do you have any questions? Click here to chat with the Q&A Bot.", "Do you have any questions? Click here to chat with the Q&A Bot."

Prototype 10: Discussion Forum

Description: Discussion Forum for participants to ask questions and connect with each other.

The screenshot shows a discussion forum page with the following elements:

- Header: "Welcome to the Amref Discussion Forum!".
- Text: "It is the forum you can meet with your peers to discuss any questions and connect and exchange experiences. This forum invites you to actively participate and engage with each other, make new connections and bonds and share your experiences with the other participants."
- Section: "Participant 1 writes: What is your experience with resourcing for public health?".
- Section: "Prototype 11: Chat bot".
- Text: "Description: Chat bot to answer any questions that come up during the learning process."

The screenshot shows a networking page with the following elements:

- Header: "Unit 1: History of Prior Public Health Emergencies" and "HISTORY OF PAST PANDEMICS".
- Text: "The Black Death (also known as the Pestilence, the Great Mortality or the Plague) is the deadliest pandemic in Europe and North Africa and is considered the most fatal pandemic recorded in human history. It spread to Europe by the merchant Venetian trader, who brought the disease from the East to Europe."
- Section: "Prototype 12: Networking".
- Text: "Description: Peer-to-Peer groups in WhatsApp."

The screenshot shows a WhatsApp chat interface with the following elements:

- Header: "PHIERI Community".
- Text: "Hi I'm 31. How can help?".
- Text: "You can type here...".



Testing

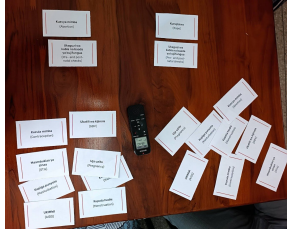
Testing allows us to put our creations in front of users and get feedback from them

Tips to remember:

- Test, don't sell
- Take notes
- Focus on:
 - What works?
 - What does not work?
 - What is missing?
 - What questions are coming up?
- Talk & explain as little as possible
- Allow users to explore as you observe
- Ask questions on how the user sees/understands different things

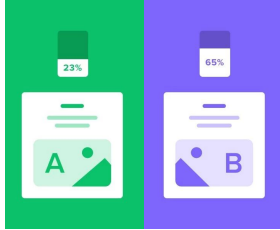


Some Effective Testing Methods



Card Sorting:

Give participants various options (content or images) and ask them to rank them based on preference.



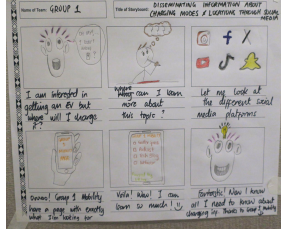
A/B Testing:

To run an A/B test, you need to create two different versions of one piece of content, with changes to a single variable.



Role Play/ Experiential:

Assigning people certain scenarios and roles and observing the improvised scenario-specific performances.



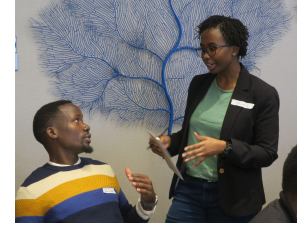
Storyboard:

Drawings or images displayed in sequence for the purpose of pre-visualising a new experience or service (e.g., a clinic visit).



Paper Mockups:

Use paper and cardboard to create a quick but interactive, physical representation of the product or experience.



Questions/ Elicitation:

Asking the users directly what they do or what they prefer (note: this is best combined with other methods - don't rely on this alone).



Activity: Testing

Prompt:

Test your prototype in another group. Remember to test, not sell!

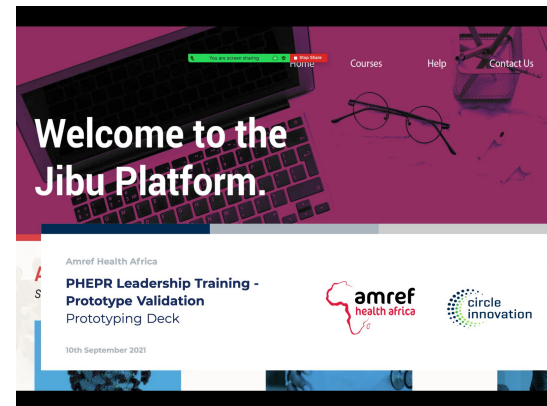
Time: 5 minutes per team (10 minutes in total)



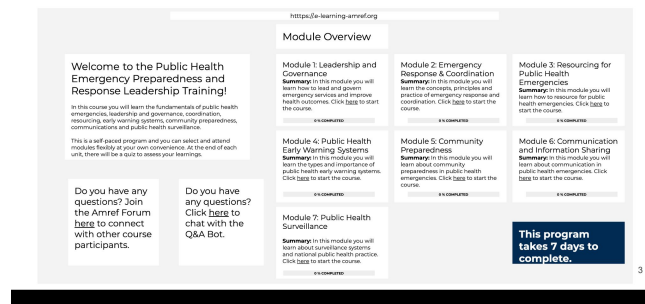
Case Study Example Step 5: Testing

Interactive testing approach (online)

- We tested the prototypes with 15 people from 7 countries
- We intentionally invited a wide range of public health professionals from unit leaders in the Ministry of Health of their country, leaders in the EOCs and NPHIs in their country, researchers and lecturers at universities as well as emergency response experts from Amref to validate the different prototype



Description: Landing page that learners see when they access the course. Shows overview of modules and summaries.



Activity: Pilot

Prompt:

- How would you pilot the leadership training?

Open discussion in plenary (5 minutes)



Implementation & Scaling

How do we move from prototyping to a final solution?

- **Testing the solution with real users** and iterate based on their feedback
- **Implement the solution in one community/locality** in small scale.
Remember to collect feedback as you implement the solution
- **Analyze the feedback:** what elements of the solution work?what does not work? And make changes
- **Scale:** Define scaling at organization level, what resources are needed?what are the metrics to collect feedback and learn as you implement?



Case Study Step 6: Piloting

We conducted:

- 30 minutes interviews with ten learners and two facilitators.
- two focus group discussions- one with learners, the other with facilitators.

Pilot with 15 public health leaders across 10 countries

- Conducted pulse checks and pilot evaluation
- As part of the pilot evaluation, we talked one-on-one to:
 - 10 learners
 - 2 facilitators
- We also conducted 2 focus group discussions

Key Takeaways

- The module content is very relevant to the learners' professions, and all the modules were found to be of equal importance.
- Potential target audiences could also include ministry of health workers or public health leaders.
- The learners were motivated to join the programme because of its relevance to their professions. It was an opportunity to learn and network. The content on leadership was found to be especially empowering for them.



ENDLINE POLL QUESTION

Questions and Answers

ANNOUNCEMENTS

- Please join the Community if you haven't already
- Accepting applications for a roster of HCD consultants — please check out the posting online
- Share any HCD + Public Health resources for our library



THANK YOU

This work would not be possible without the support of the William & Flora Hewlett Foundation.



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