

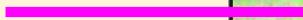
SESSION 8 WED, APRIL 24



DWeb's Social and Community Impact



Sarah Grant





AGENDA

| | |
|----------------------|---|
| 10:30 - 10:40 | Session Introduction |
| 10:40 - 11:05 | Components of a diy network <ul style="list-style-type: none">• Applications• Infrastructure• Human roles |
| 11:05 - 11:10 | Break |
| 11:10 - 11:55 | Case Studies <ul style="list-style-type: none">• Community Networks• Feminist Servers• Social Justice• Environmental |
| 11:55 - 12:00 | Break |
| 12:00 - 12:30 | Group Exercise |
| 12:30 - 12:50 | Discussion & Insights |
| 12:50 - 13:00 | Closing Thoughts & Next Steps |

TODAY'S CONSIDERATIONS



LEARNING OUTCOMES

- 1 How to define the criteria against which one would design a community network
- 2 How to architect a community network and define roles.
- 3 What to consider when designing a community network to be sustainable



RULES OF ENGAGEMENT



Ask clarifying questions at any time; save open questions for the discussions



Write your opinion freely on silent individual activities



Say your opinion freely in group activities



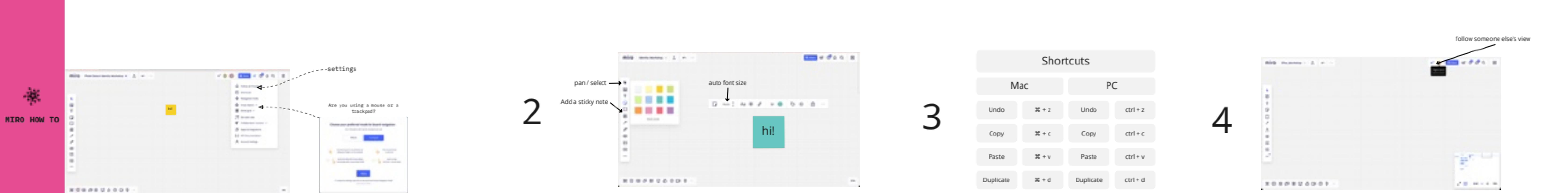
Mute yourself during silent individual actions; and in general if your background is noisy



Write in the chat when you take a break (no need to announce it)



We follow the Gray Area's Code of Conduct



MIRO HOW TO



COMMUNICATION

NextCloud

[NextCloud](#)

DOCUMENT CREATION AND MANAGEMENT

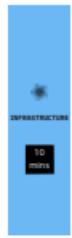
Next Cloud

CoBox(DAT based cloud)



SOCIAL APPLICATIONS

Matrix chat



ROUTERS

OpenWRT
TP-Link
Raspberry Pi

Haltec V3 esp32 - with LoRa, Wifi, Bluetooth

ESP 32
[gl-mt300n-v2](#)

ANTENNAS

TP-Link - runs as access points, wifi, ad hoc, mesh point, monitor

Any USB Wifi dongle - for wifi, access points

DATA STORAGE

External drives
SD cards
Network drives



DESIGNER

Who is the network designed for? Access considerations? Device, bandwidth considerations?

What or who are we supporting with this network, what are we trying to solve?

Who will plan and implement the network and applications?

Who will plan and implement the hardware infrastructure?

Who will do this for software infrastructure
• setting up next cloud
• setting up user accounts

Who will design user experience, user interface, iconography

BUILDER

Who will plan and implement the network and applications?

Who will plan and implement the hardware infrastructure

Who will do this for software infrastructure
• setting up next cloud
• setting up user accounts

media streaming

Obtaining permits for installing infrastructure

MAINTAINER

Who will maintain the network and applications? If the network is wound down, what happens to the user data and identifying information?

Will the applications be self-hosted on the router or an external storage device?

Will the network be taking advantage of a distributed model

It can also refer to being a part of network infrastructure itself;

Where will the antennas and routers live? Community center, library, people's homes

10 mins

10 mins

15 mins

COMMUNITY BUILDING

building community, making it known to people growing a community events, outreach

HOSTS

Where will the network and applications be hosted?
Will there be community training programs? trainings on how to build out and implement infrastructure, web admin, system operations, visual design, other examples?

Will the applications be self-hosted on the router or an external storage device?
Where / how will it be hosted
Will it be translated into which languages?
Accessibility considerations

Project documentation:
-Case studies

- the reach of your network, who is using the network
- how many monthly network participants
- what is the social impact of this project

Photo documentation of the network

EDUCATIONAL OUTREACH

Who will write the technical documentation
• what are the components of the system, the network
• passwords, ssh keys, security keys and protocols
• network diagram of the infrastructure
• list of software used and developed

Who will write the grant applications
Who will create and prepare materials for grant applications,

Really important to document your work,
Keeping an eye on funding resources, lists of grant giving bodies, institutions, government

DOCUMENTATION

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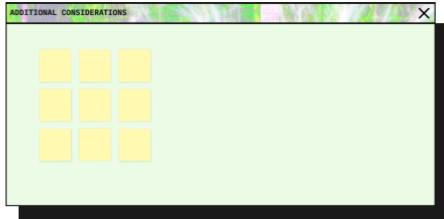
FUNDING / GRANTWRITING

- what are the components of the system, the network
- passwords, ssh keys, security keys and protocols
- network diagram of the infrastructure
- list of software used and developed

GROUP ONE: DESIGNING A COMMUNITY NETWORK

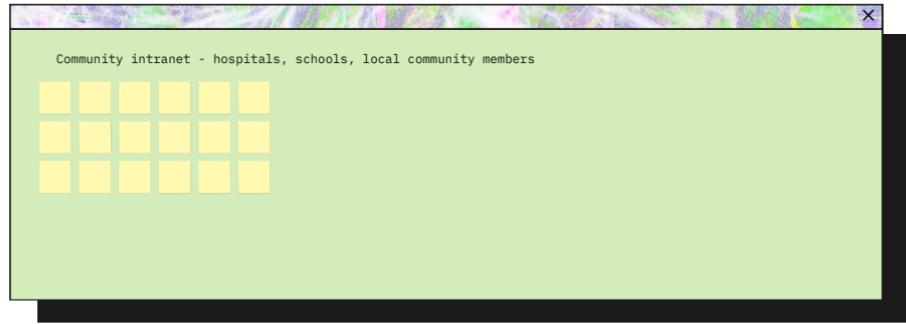
BREAK OUT WORKING SPACE

30
mins



DISCUSSION & INSIGHTS

10
mins

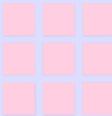


GROUP TWO: DESIGNING A COMMUNITY NETWORK

BREAK OUT WORKING SPACE

30
mins

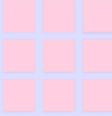
APPLICATIONS



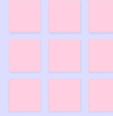
INFRASTRUCTURE



HUMAN ROLES



ADDITIONAL CONSIDERATIONS



DISCUSSION & INSIGHTS

10
mins

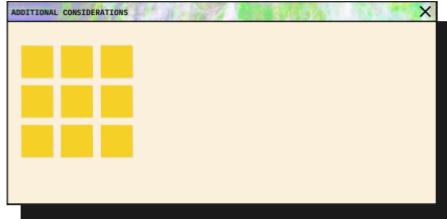
DISCUSSION & INSIGHTS



GROUP THREE: DESIGNING A COMMUNITY NETWORK

BREAK OUT WORKING SPACE

30
mins



DISCUSSION & INSIGHTS

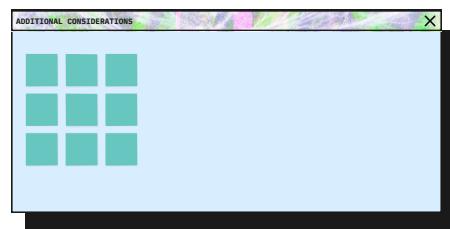
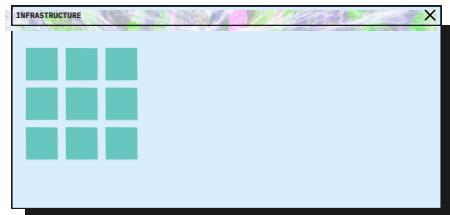
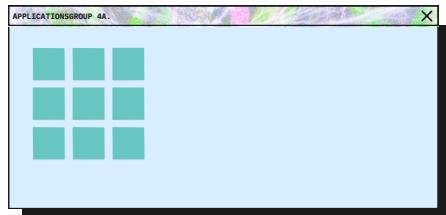
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GROUP FOUR: DESIGNING A COMMUNITY NETWORK

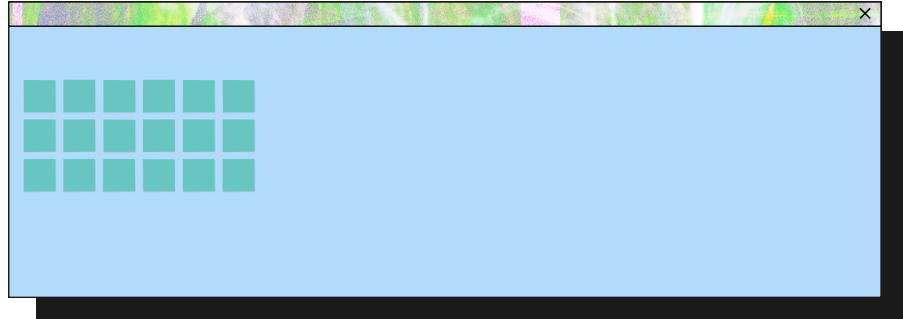
BREAK OUT WORKING SPACE

30
mins



DISCUSSION & INSIGHTS

20
mins



ADDITIONAL LINKS AND READING

[Transhackfeminists](#)

[Calafou.org](#)

[low tech magazine](#)

[https://radicalnetworks.org/archives](#)

[https://www.giswatch.org/sites/default/files/giswatch18_web_0.pdf](#)

[https://www.bi0film.net/](#)

[https://github.com/phillycommunitywireless](#)

[https://phillycommunitywireless.org/faq/](#)

[https://www.rhizomatica.org/hermes/](#)

[https://livestream.com/accounts/686369/events/8860373/videos/198024988](#)

[https://communitytechnology.github.io/](#)

[https://heltec.org/project/wifi-lora-32-v3/](#)

Hunts Point NYC



COMMUNITY NETWORKS



Since 2017, the Hunts Point Community Network (formally the Free Hunts Point Community Wifi Mesh Network) has offered a free wireless Wifi mesh network for the Hunts Point community that is resilient, community-owned and managed by local residents and businesses.

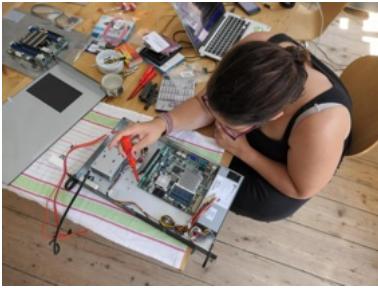
The HPCN is the first and only mesh network in the South Bronx that provides free Wi-Fi before, during and after a climate emergency.

Based in the Hunts Point peninsula, the network is operated by local business and residents that are trained to install and maintain the network that currently offers up to 600 individuals free Wi-Fi throughout the month.

SysterServer.net



FEMINIST SERVERS



Syster Server offers services to its network of feminist, queer and antipatriarchal folks.

The syster server is run by feminists, using FOSS. It acts as a place to learn system administration skills, host services and inspire others to do the same. Systerserver was launched early 2005 by Gender Changers Academy.

Rhizomatica



SOCIAL JUSTICE



To develop the principles that would guide our work, the DDJC conducted a series of interviews amongst our founding members.

The interviews explored how coalition members were using media and technology for community organizing or grassroots economic development and to describe their vision for "digital justice" in Detroit. We developed the following digital justice principles from common themes that emerged in these interviews.

Access

- Digital justice ensures that all members of our community have equal access to media and technology, as producers as well as consumers.
- Digital justice provides multiple layers of communications infrastructure in order to ensure that every member of the community has access to life-saving emergency information.
- Digital justice values all different languages, dialects and forms of communication.

Common ownership

- Digital justice fuels the creation of knowledge, tools and technologies that are free and shared openly with the public.
- Digital justice promotes diverse business models for the control and distribution of information, including: cooperative business models and municipal ownership.

Solar Protocol



ENVIRONMENTAL



The Solar Protocol network reconfigures internet protocols using a kind of natural rather than artificial intelligence.

The network routes internet traffic according to the logic of the sun, where page requests are sent to whichever server is enjoying the most sunlight at the time. We are working with people around the world who have built and installed servers that host this site alongside their own web content. When their server becomes the active node of the network, their online materials (if any) will soon become visible on this site.