



Meaningful Access, Data & Hyper Local Communities



Partners























Introduction

In today's rapidly evolving digital landscape, access to information, technology, and data has become a critical enabler for societal progress. However, millions of people, especially in marginalised and underserved areas, continue to face barriers that prevent them from fully participating in the digital world. For these communities, digital access is often limited by issues such as poor infrastructure, low digital literacy, and inadequate resources. As a result, they miss out on opportunities for education, healthcare, economic development, and civic participation.

The Community Network Xchange (CNX) enters its 9th year, focusing on the theme 'Meaningful Access, Data & Hyperlocal Communities' to promote a more inclusive approach to digital access and address ongoing challenges. It calls for solutions that are not only about connecting people to the internet but also ensuring that communities have the tools, knowledge, and resources to use technology meaningfully. Through CNX, we aim to empower communities to harness the power of data and digital tools to drive their own development and solve locally relevant challenges. By focusing on hyperlocal solutions, we can implement interventions that are responsive to the specific needs and contexts of each community.

Background

Despite the rapid expansion of internet connectivity in many parts of the world, significant digital divides persist, particularly in rural, remote, and low-income areas. These divides not only hinder access to critical services but also perpetuate inequality by limiting opportunities for education, employment, and participation in governance. Additionally, in many communities, access to digital resources is often shallow, focusing on basic connectivity without considering the deeper needs of the population, such as digital literacy, local data collection, or the ability to advocate for their own rights through digital tools.

The lack of meaningful access to technology and data compounds these inequalities, leaving communities without the ability to use digital platforms to solve their problems. Meanwhile, the hyperlocal approach—focusing on local, community-driven solutions—has proven to be an effective way to address these gaps, ensuring that digital tools are developed and implemented in ways that are sustainable and relevant to the people they are meant to serve.



Objectives

Meaningful Digital Access:

To ensure that marginalised communities have not just access to technology, but the tools, resources, and support to make full use of it.

Data Empowerment:

To equip local communities with the knowledge and skills needed to gather, analyse, and use data to address local issues and advocate for their needs.

Hyperlocal Connectivity Solutions:

To foster the creation of digital infrastructure that is owned, managed, and maintained by local communities, providing sustainable and context-specific connectivity solutions.

Sustainable Impact:

To build a scalable model that can be replicated in other underserved areas, creating long-lasting change in how communities use digital tools for development.

Sub-Topics for CNX 2025:

1. Rethinking Meaningful Access

- From infrastructure to usability: What does "meaningful" really mean?
- Local content and language as pillars of access
- Accessibility for persons with disabilities and excluded groups

2. Community-Led Connectivity Models

- Grassroots-driven networks: governance, ownership, & sustainability
- Infrastructure innovations: mesh, solar, low-tech solutions
- Women and youth leadership in connectivity efforts



3. Hyperlocal Data, Knowledge, & Power

- Community-generated date for planning and advocacy
- Participatory mapping and data stewardship
- Data justice and protecting digital rights at the local level

4. Digital Inclusion and Social Justice

- Bridging the gender digital divide
- Indigenous and marginalised communities: inclusion through design
- Digital literacy and resilience in the face of misinformation

5. Policy and Regulatory Enablers

- Creating enabling environments for community networks
- Spectrum allocation, licensing, and local governance

6. Sustainability of Community Networks

- Financing models for long-term operation
- Community ownership and accountability
- Building technical capacity for local management

7. Technology as a Tool for Local Empowerment

- Open-source tools and platforms for community use
- Offline- first solutions and low bandwidth innovation
- Building local apps, services, and content



8. Data Sanctity, Privacy & Ethics

- Protecting Community Data from Misuse and Extraction
- · Ethical Data Collection in Hyperlocal Contexts
- · Consent, Control, and Data Transparency at the Local Level
- Safeguarding Data in Conflict and Crisis Zones

9. Data Literacy for All

- · Bridging the Data Literacy Gap in Underserved Communities
- Tools & Approaches for Grassroots Data Education
- · Community Data Journalism: Truth-Telling from the Margins
- · Demystifying AI and Big Data for Everyday Use

10. Data for Advocacy, Accountability & Action

- Using Data to Influence Local Policy
- Participatory Data Mapping and Visualisation
- Stories in Numbers: From Data to Civic Change
- Youth and Women in Data Advocacy

Target Audience



Underserved and Marginalised Communities:

These include rural areas, remote villages, low-income urban neighborhoods, and indigenous groups, who face challenges related to both access to digital tools and digital literacy.

Community Leaders and Activists:

Individuals and organisations that play a pivotal role in advocating for local development and can champion the adoption of technology in their communities.





Local Governments and Policymakers:

Local authorities who can support and scale community-driven digital solutions and advocate for policies that enhance digital inclusion and data rights.

Digital Innovators and Local Tech Entrepreneurs:

Those interested in developing community-centered, sustainable technology solutions that are relevant to local needs.





Communities Advocating for Community Networks:

Local groups and grassroots organisations already working to establish or promote community-owned and managed internet infrastructure as a means of enhancing digital inclusion.







Proposed Sessions

Community Governance Roundtable

A facilitated dialogue on community governance models for managing networks and digital resources - exploring co-ownership, transparency, and accountability.

DIY Network Build Simulation

A hands-on technical workshop on setting up a low-cost mesh network using routers, open-source firmware, and solar power.

Purpose: To demystify the process of deploying community networks and promote technical self-reliance.

Panel Discussion: "Sanctity of Data: Trust, Truth, and Community Control"

To explore how communities can safeguard the sanctity and authenticity of local data in the face of misinformation, surveillance, and extractive practices.



Roundtable/Panel Discussion - "Who Owns Our Data? Reclaiming Digital Sovereignty"

Will discuss data ownership in the context of community networks, local knowledge systems, and indigenous data rights.

Panel Discussion - "Hyperlocal Infrastructure, Hyperlocal Data: Can They Coexist?"

Discussing how locally managed infrastructure can support local data collection and storage.

Case Stories Recording

Voices from the Ground - Showcasing of the case stories from communities across the Asia-Pacific region who are working to enable accessibility, connectivity, and local innovation through community networks.



Advocacy and Policy Engagement

Engage with local and regional governments to advocate for policies that promote digital inclusion and empower community-led technological solutions. Through organised community meetings, participatory discussions, and targeted awareness campaigns, emphasising the critical importance of meaningful digital access, community networks, and local data sovereignty. These efforts aim to influence policy environments to be more inclusive, participatory, and responsive to the needs of underserved and hyperlocal communities.

Roundtable: Community Governance of Technology

Discussion on how communities govern networks, data, and digital tools in ways that are democratic and inclusive.

Lightning Talks: Short 5–7 minute presentations by community network practitioners, focusing on:

Models of meaningful access in low-resource environments.

Local use of data for service delivery or advocacy.

Governance and sustainability models for community networks.



Conclusion

CNX 2025 will address the issues of digital exclusion by providing meaningful access, data empowerment, and locally-driven solutions to underserved communities. By focusing on hyperlocal connectivity, data for advocacy, and community engagement, it will create lasting impact, empowering communities to take control of their own digital futures.



Scan to know more

Contact Information

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