

ROLE OF COMMUNITY NETWORKS IN BUILDING DIGITAL SUPER HIGHWAY IN AFRICA

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What is a Community Network ?

A community network is a computer-based system that is intended to help a geographically-located communities by supporting, augmenting, and extending already existing social networks, services, needs using networking technologies by, with, and for, a community to catalyze sustainable economic and livelihoods

Community Network - Composition

- ⊙ “Community” in community networks
- ⊙ Technical Communities
- ⊙ Non-governmental Organizations (NGOs)
- ⊙ Policy-makers & Legal Experts
- ⊙ Civil Society Organizations (CSOs)
- ⊙ Government Agencies
- ⊙ Academia and Researchers

Why Community Network ?

- ◎ Community networks aggregate a wide variety of information and communication services in a central, though "virtual," location, becoming, in effect a nonprofit.
- ◎ Community networks are general purpose and strive to support the six "community core values," defined by Douglas Schuler (1996) as conviviality and culture; education; strong democracy; health and well-being; economic equity, opportunity, and sustainability.
- ◎ In addition to performing the technical duties related to running a networked computer for a large community, community network developers typically engage in a wide range of other related activities including training, social activism, entrepreneurship, and advocacy.

Which areas do Community Networks fit in...?

Health & Wellness

01

CNs due to their diversity in reality, can plug into health and advocate for safe health space- This can be achieved through conducting health-related research, mental health awareness among many.

Education & Digital Literacy

02

Conducting Digital Literacy trainings for schools teachers, students and to the general community is key aspect. There is a disconnect between internet access and knowledge.

AgriTech

03

Using technology and technological innovation to improve the efficiency and output of agricultural processes..

Fintech & Business

04

Smaller innovations that we come up with to support local people in managing, and controlling their business.

Access to Internet

05

Access to meaningful internet services is one key factor. It gives everyone equal digital opportunities to communicate, explore, research , get entertained, connect, and transact.

Policy and Advocacy

06

CNs plays a very vital role in championing the interest of the marginalized, or disadvantaged groups to the government and policy makers e.g Online Gender-Based Violence (OGBV)

Technologies used in Community Networks

- ⦿ Wi-Fi Technologies
- ⦿ Free Space Optical Communications (FSOC) – Tanda
- ⦿ Use of TV White Spaces (TVWs) - Tested by Dunia Moja Community Network in Kenya and Kondoa Community Network in Tanzania.
- ⦿ Fiber Optics Technologies FTTx Technologies and applications – Giufi.net & Doe Bay Internet.

Role of Stakeholders in Community Networks

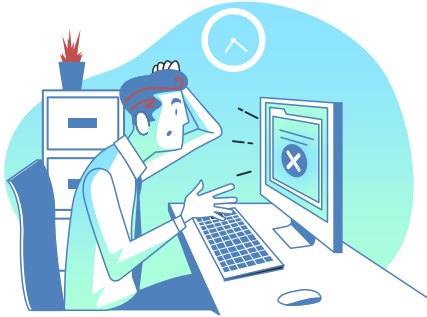
- 1. Establish an enabling policy environment** — Removing regulatory obstacles to building networks is crucial to attract funding and scale up. Governments can reduce permitting bottlenecks and set up fees to speed up deployments. Regulations should be forward looking to encourage innovation.
- 2. Provide financial support** — Funding is necessary to ensure the sustainability of these networks. Governments, alongside private sector companies, can fill funding gaps. [Universal Service Funds are an untapped resource](#) that could support the growth of community networks and help close the digital divide. Governments can also provide access to land and refrain from taxation for a period.

Role of Stakeholders in Community Networks – Cont'd

3. Open up the space the networks need to operate — Governments can allocate spectrum — the radio frequencies that allow for wireless communication — to enable community networks to develop. This can be achieved either by specific licenses for these networks or by providing access to unlicensed spectrum.

4. Facilitate partnerships with mobile phone operators — Public access solutions require commitment from a variety of stakeholders. Governments can facilitate or even incentivize partnerships with mobile phone operators to aid in the creation, supply of technology and maintenance of community networks.

Gaps in Community Networks



Sustainability Models

A good number of Community Networks are either championed by a group or individual with whom their financial capacity is not enough to take care of Opex and Capex. Most CNs depend on goodwill and donor funds which are not obvious/ sure deal.

Financial Sustainability

Due to the diversity in operation of community networks, coming up with a proper business model is a big issue due to the fact that most CNs are serving either marginalized, disadvantaged or remote user groups

Technical Sustainability

Most countries / states have not actually created enabling environments for CNs to operate in. CNs are subjected to unfair competition from big telcos. CNs rely on grassroot , “cheap” labor - Volunteers

Understanding Community Networks

What Community Networks need



Innovations & Inventions

Community Network players need to constantly reasearch on relevant pain points in the community and providing tailored solutions in a manner that promotes livelihoods of a community.



Partnerships & Collaborations

Organizations, groups, alliance and communities, Universities, Colleges need to join hands to make sure we bridge the digital divide. (Funding, Supporting, Volunteering, Advocacy)



Government Agencies

Government should formulate policies and regualtions governing and protecting and promoting the growth and operations of Community Networks .eg tax exempt, low fees, capacity building and funding (Universal Service Funds)

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The logo for Joburg, featuring the word "Joburg" in a stylized, white, lowercase font. The letters are arranged in two lines: "Jo" on top and "burg" on the bottom. The logo is set against a large, solid yellow circle. The background of the entire slide is a vibrant blue, and at the bottom, there is a white silhouette of a city skyline with various buildings and structures.

Joburg