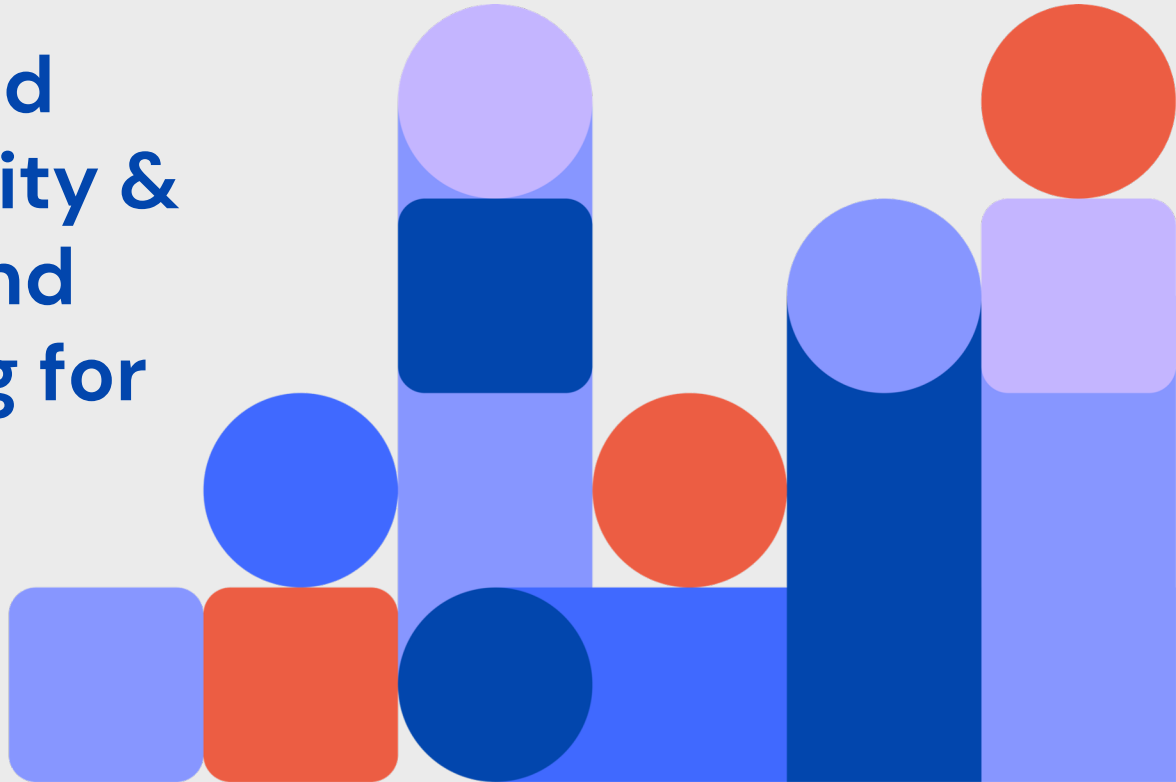


Financing Local Networks to Build Local Connectivity & Communities, and Mobilize Funding for Sustainable Development

8 May 2023



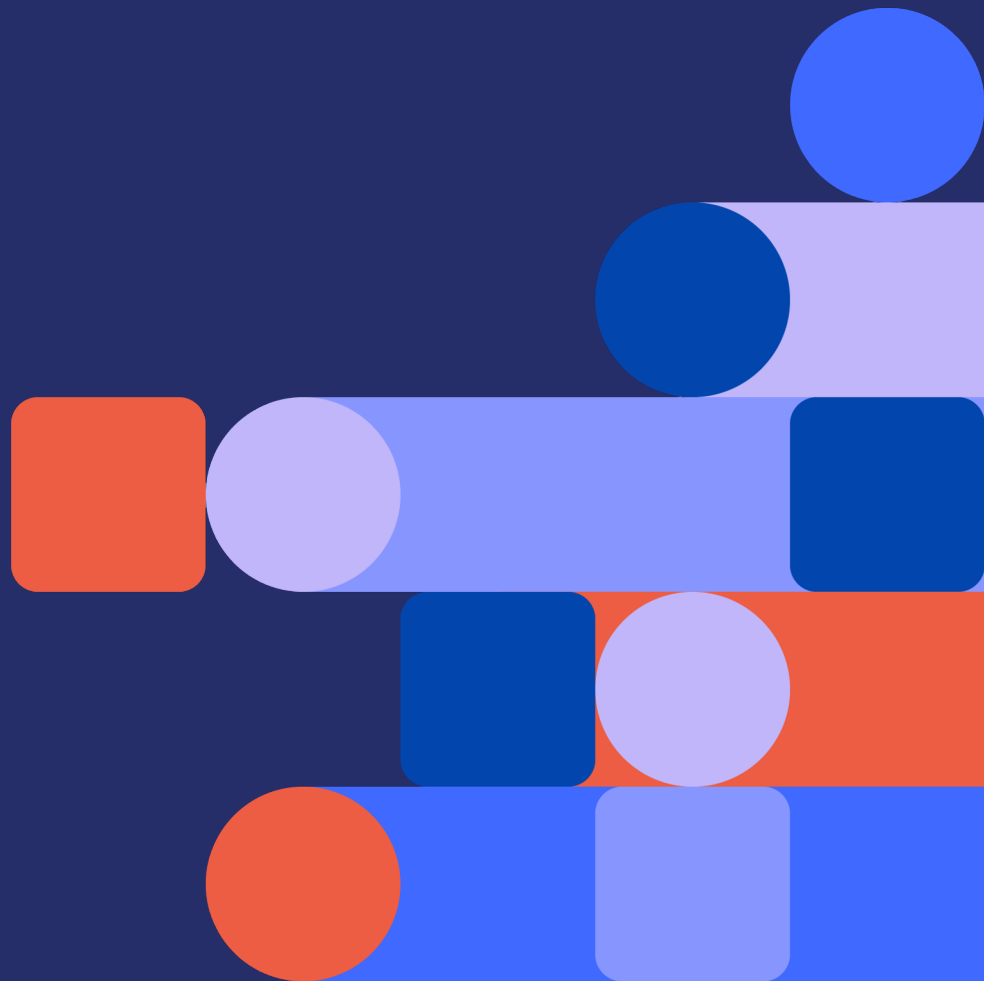
APRIL/2023

Agenda

- 01** Financing
Mechanisms Report
- 02** Financing
Mechanisms for Local Nets
- 03** Perception of Risk –
Donors are Nervous
- 04** Deploying Local
Networks

- 05** Capacity
Development
- 06** Wrap Up

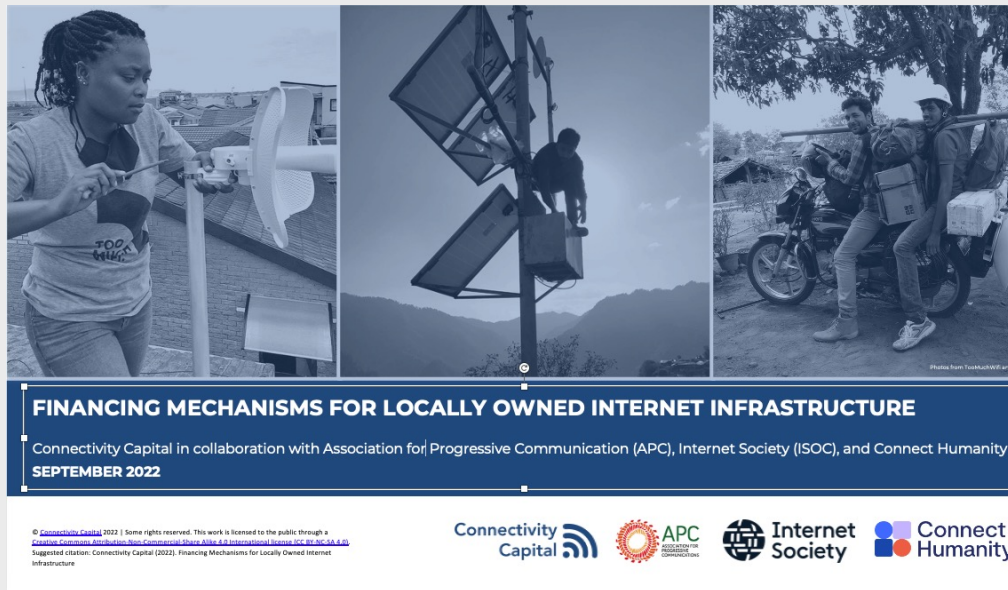
1. Financing Mechanisms Report



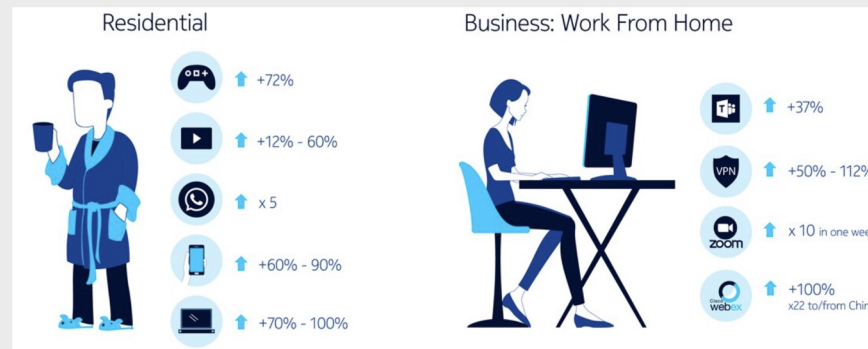
Financing Mechanisms for Locally Owned Internet Infrastructure



- Report previewed in Kigali @WTDC 22
- Expert Team with Global Local Experience
- Partners
- Operational Experience
- Know Communities
- Know Funders
- Beta Testers who Test, Adapt, Learn, Improve
- <https://connecthumanity.fund/report-financing-ccps/>



***State of Connectivity: The world is divided - separated by communities who can and can't reap the benefits of internet access. Covid-19 has only underscored this divergence.**

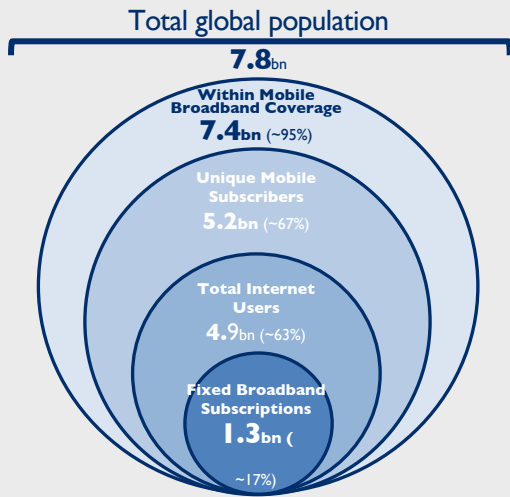


- Internet traffic volume has **grown ~50-60% since pre-pandemic levels**, driven primarily by working from home (video conferencing and collaboration, VPNs), learning from home (video conferencing and collaboration, e-learning platforms) and entertainment (online gaming, video streaming, social media).
- At the same time, the COVID-19 pandemic illuminated a long-standing issue: **The many low-income communities around the world that lack reliable and / or affordable access to connectivity are being left further behind.**

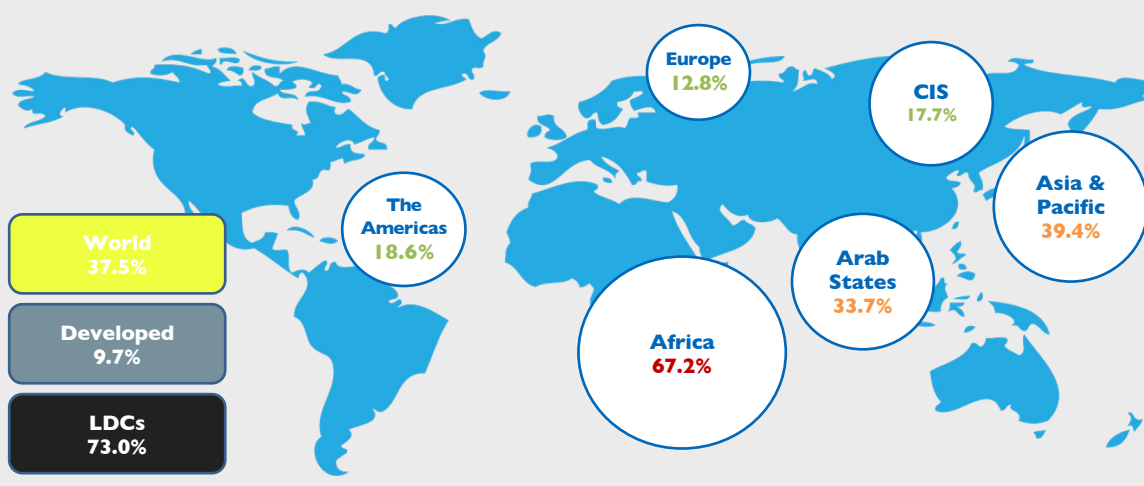
Source: [Google](#), [Nokia](#), [Lightwave](#)

*State of Connectivity: 37% of the global population is offline, predominantly in emerging markets

Global Participation in the Digital Economy



Offline Population by Region

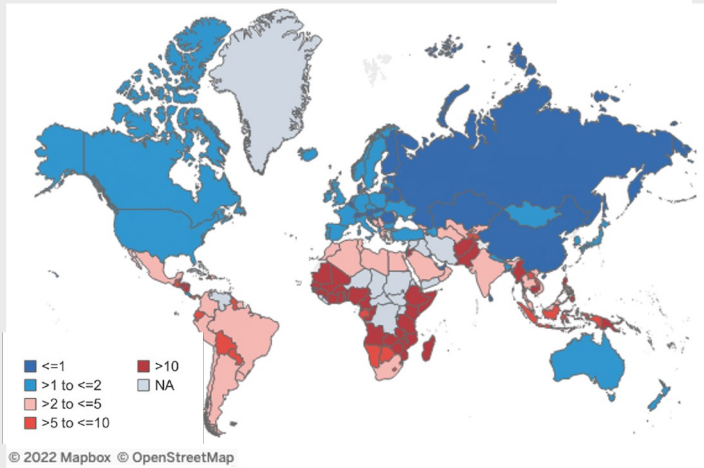


- The global online population has accelerated during the pandemic, increasing by nearly **20%** since 2019 to **4.8 billion** users.
- **96%** of the **2.9 billion** offline population live in developing countries and face multiple barriers to access.

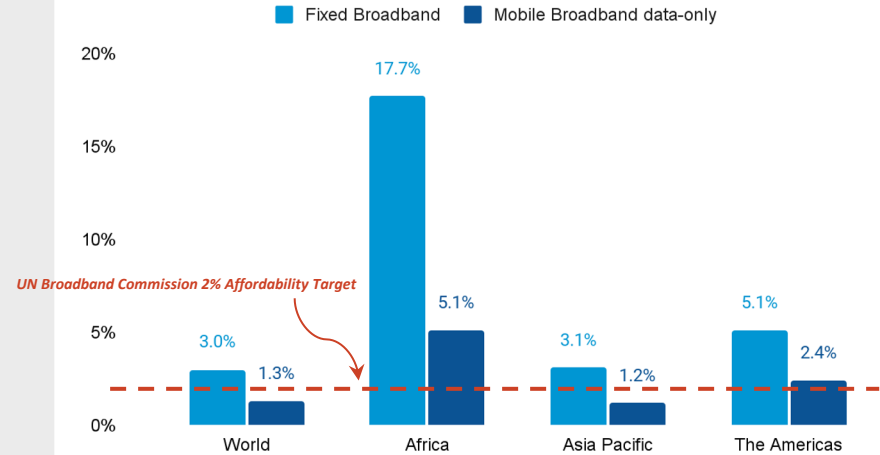
Source: [ITU Measuring Digital Development Facts & Figures, 2021](#); [GSMA Mobile Economy 2021](#)

*State of Connectivity: Affordability continues to be one of the most significant barriers to sustained usage

Cost of a Fixed broadband basket (min 5GB) as a % of GNI (2021)



Fixed and Mobile-data broadband basket prices as a % of GNI (2021)















- In least developed countries (LDCs), while the median price for entry-level broadband has been declining, it remains beyond the means of the average consumer in all but 4 of the 43 LDCs for which data could be obtained.
- For fixed broadband, among the 33 LDCs for which data is available, only one has met the two per cent target.

Source: [ITU Measuring Digital Development Facts & Figures, 2021](#), [ITU ICT Price Baskets](#)

***Connectivity in emerging markets: Understanding the barriers to access within the context of the developed and emerging markets is important to initiate appropriate interventions**

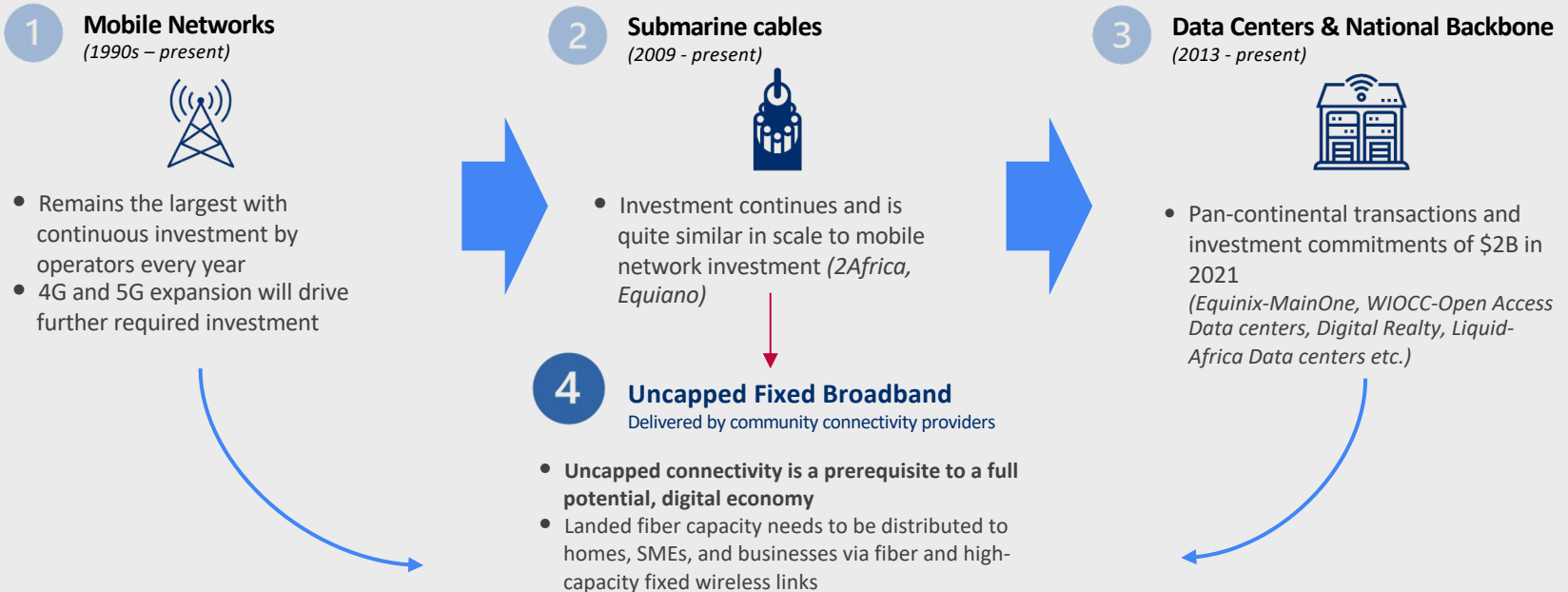


	Urban (Underserved)	Rural (Unserved)
Developed Markets	<p>Largely addressed except for historically disadvantaged communities. The gating issue is market inefficiencies resulting in a lack of coverage, choice and affordability.</p> <p><i>Availability</i> <i>Affordability</i> <i>Adoption</i></p>   	<p>Sparsely distributed populations over large areas. Some one-time subsidies may be required to build out infrastructure to these areas but generally, the population has the ability to pay for service.</p> <p><i>Availability</i> <i>Affordability</i> <i>Adoption</i></p>   
Emerging Markets	<p>Mobile data is prevalent but its usage is capped and expensive. Affordability is the key issue stifled by a lack of fixed infrastructure and nascent market dynamics.</p> <p><i>Availability</i> <i>Affordability</i> <i>Adoption</i></p>   	<p>Ongoing subsidies may be required to address the availability, affordability, and adoption barriers in these areas that are usually characterized by low per-capita income.</p> <p><i>Availability</i> <i>Affordability</i> <i>Adoption</i></p>   



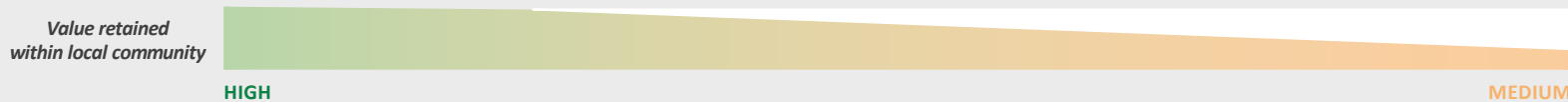
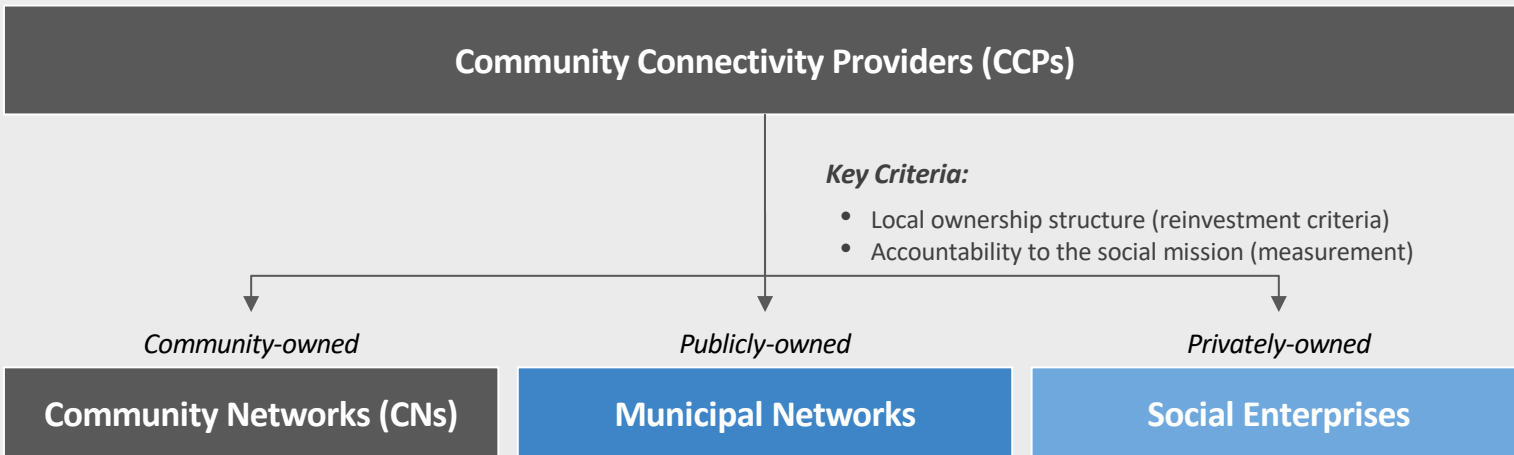
*Connectivity in emerging markets: The market is primed for a new fourth wave of internet infrastructure delivered by non-incumbent community connectivity providers

Major waves of investment in connectivity infrastructure



Source: Connectivity Capital Analysis

*Role of CCPs: Three broad categories of community connectivity providers



Financing Mechanisms for Local Networks



*Financing mechanisms: The three main types of external financing instruments are unique in their characteristics and usage

	Grants	Equity	Debt
Key Characteristic	No repayment	Investment for ownership	Investment for yield return
Stage	Early (Stage 1-2)	Early & Growth (Stage 2-4)	Growth (Stage 3-4)
Pros	<ul style="list-style-type: none"> Not repayable Non-dilutive Risk-tolerant 	<ul style="list-style-type: none"> No interest payments Long term expectation 	<ul style="list-style-type: none"> Non-dilutive Fixed length
Cons	<ul style="list-style-type: none"> Cyclical Availability Reporting Requirements Restrictions on use 	<ul style="list-style-type: none"> Dilutes Ownership Liquidity Expectations 	<ul style="list-style-type: none"> Repayments Interest

Key Questions to Consider

1. What stage is the operator at in its *company lifecycle*?
Starting, Sustaining, Growing or Maturing
1. What type of *control* is the operator willing to give up?
Ownership, approval, information, etc?
1. What is the true *cost of capital*?
Transaction cost, control premium, and all-in cost of capital?

Trade-offs: Economics - Control - Transaction Costs

Financing mechanisms: The different financing instruments and risk mitigation strategies can be combined to make up a blended capital stack for an operator

BLENDED CAPITAL & WHY IT IS NEEDED

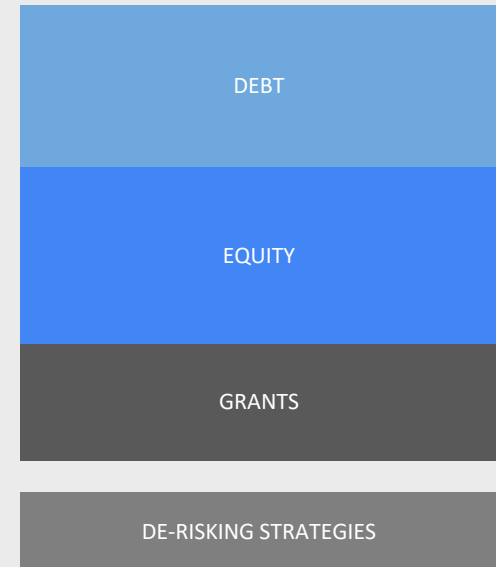
With the range of potential financiers and magnitude of gaps in terms of connectivity, it is necessary to find strategic ways to pool resources to increase the available funding to close the related funding gaps.

Blended finance refers to the mixing of concessionary capital, which can take risk without commensurate return, with market-rate private investment. The concessionary capital **catalyzes additional private capital** for several reasons:

- **Viability / validity:** The presence of a sector-specific player acting as concessionary capital signals that the fund and investment thesis are sound
- **Risk-return profile:** The concessionary capital improves the risk-return profile of the investment for other investors
- **Impact:** The catalytic nature of the funding, and the improved viability of the fund, creates outsized impact

Blended finance allows organizations that have different objectives to collaborate and invest alongside each other while achieving their own financial and/or developmental objectives

BLENDED CAPITAL STACK OF A CCP





CCPs HAVE DISTINCT COMPETITIVE ADVANTAGES

- The financial feasibility of CCPs are largely determined by the degree to which they can avoid or decrease costs of building & operating a network.
- CCPs that engage local stakeholders, and leverage community resources to lower the cost of deployments have a higher chance of sustainability.



STAGE & STRUCTURE AFFECT CAPITAL AVAILABILITY

- The capital available to CCPs is a function of their stage of growth, financial sustainability, and choice of owner-operator model
- CCPs that are self-reliant, evolving into meso organizations, or have specialized local registration status have an enhanced ability to deliver connectivity at scale and attract larger amounts of capital.

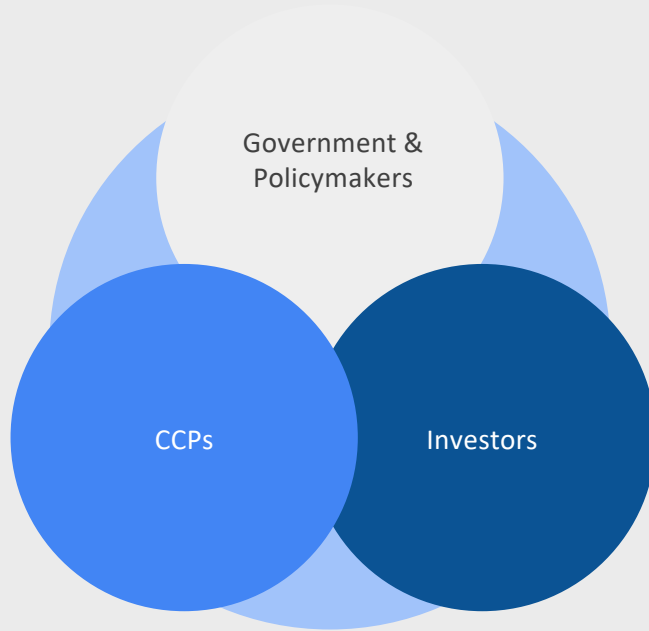


ALIGNMENT OF FINANCIAL EXPECTATIONS IS KEY

- When choosing between different financing mechanisms, CCPs have to evaluate trade-offs, true cost of capital, and return expectations.
- CCPs that match financing sources with appropriate projects and return profiles are most likely to have access to sustained funding.

*Three major actors influence the impact of CCPs

Major Stakeholders in Financing Ecosystem



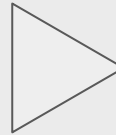
Why Allocate Additional Capital to CCPs?

- CCPs operate in unserved and underserved communities where traditional commercial operators do not.
- CCPs address market failures and serve nascent markets that commercial operators believe to be unprofitable.
- CCPs have demonstrated viable, alternative, low-cost strategies that are adaptable to local context and can scale.
- CCPs prioritize locally owned and operated projects that retain value within the community, create local employment, and support self-reliance.

*Recommendation for government & policy makers: Create an enabling regulatory environment that supports CCP development and encourages investment

Enabling regulatory environment for CCPs

- **INTEGRATE** all types of CCPs (CNs, Municipal Networks, Social Enterprises) into the national broadband strategy and digitization policies
- **SIMPLIFY** and streamline licensing regulations and procedures that provide legal status to CCPs
- **ESTABLISH** clear options for affordable spectrum usage, pole and duct access, and infrastructure sharing policies
- **CREATE** transparent wholesale open access to backhaul through open data platforms or investments in physical infrastructure (dark fiber, conduits, etc.)



Encourage investments into CCPs

- **FISCAL INCENTIVES:** Fee exemptions (customs waivers on import duties for open-source hardware/software) and tax breaks for investors
- **FINANCIAL CONTRIBUTIONS:** Dedicated USAF allocation for CCPs, voucher schemes, grants, low-interest loans and loan guarantees
- **TECHNICAL ASSISTANCE:** For capacity building, feasibility studies, quality assurance, technical and management expertise, governance models, open-source tools etc.

Light-touch and proportionate regulations for CCPs to keep transaction costs affordable and reduce barriers to entry

Targeted & transparent 'smart' subsidies that reduce over time with an end-point and incentivize investments

Source: Adapted from [APC](#) and [ISOC](#) materials

*Recommendations for funders: Unlock additional funding for CCPs that are financially sustainable and generate significant social impact

A

Grant-Supported

- **Reduce the transaction costs** of subsidies & grants - increase flexibility, simplify impact metrics, and streamline reporting requirements
- **Consider one-time grants** to offset client installation costs
- **Right-size grant support** based on stage of CCP and scale of operations
- **New multi-cycle phased grant making strategies** that encourage operators to move to next sustainability milestone and unlock larger funds at each subsequent stage

B

Sub-Commercial

- **Recognize and value the unconventional assets built up by the community** - local community engagement and participation, access to property and rights of way, access to spectrum and/or social-purpose spectrum licenses
- **Reduce transaction costs** by fronting key issues (financial and impact targets, reporting frequency and metrics, terms)
- **Provide more capital and liquidity** to operators with demonstrated track record and meso organizations
- **Use innovative mechanisms** - blended finance, concessional loans, credit guarantees etc.

*Case studies

11 case studies across 10 countries...

This report covers the following broad topics:



Operator life-cycle and stages of growth



Economics of operating a network



Ownership structures



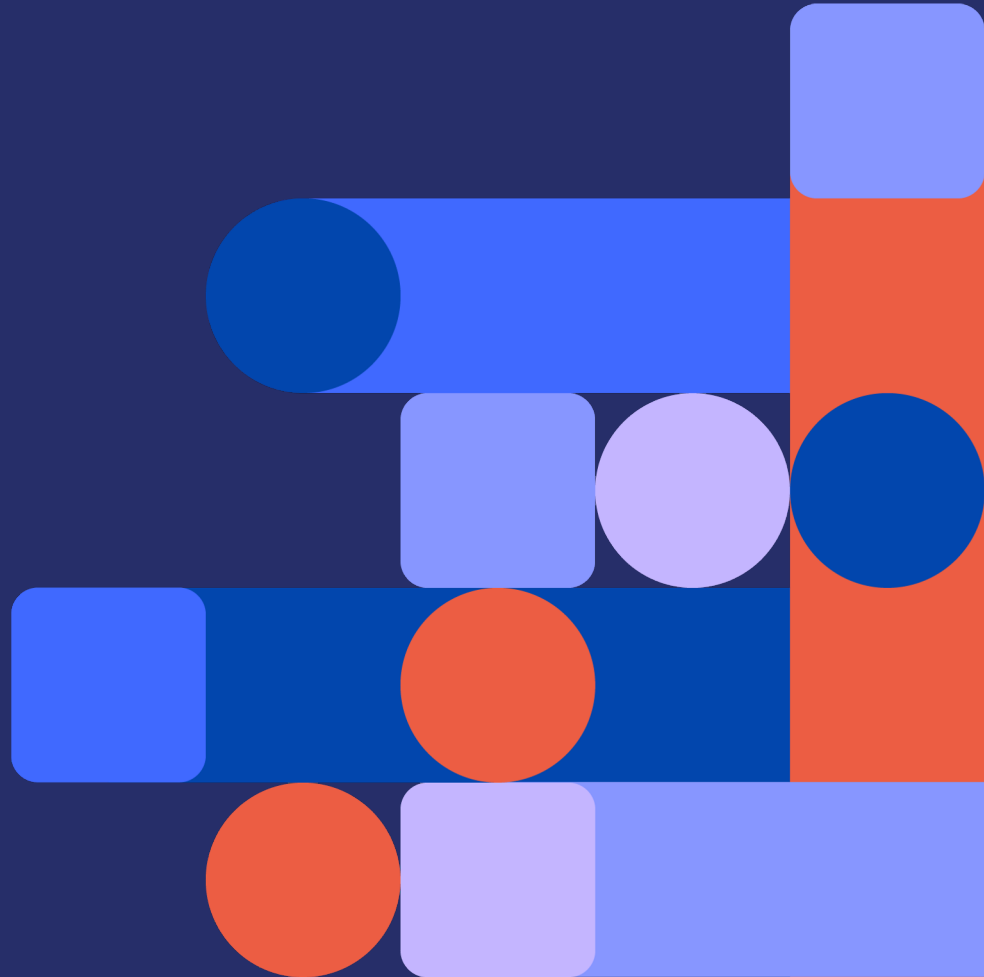
Operating models



Financing mechanisms

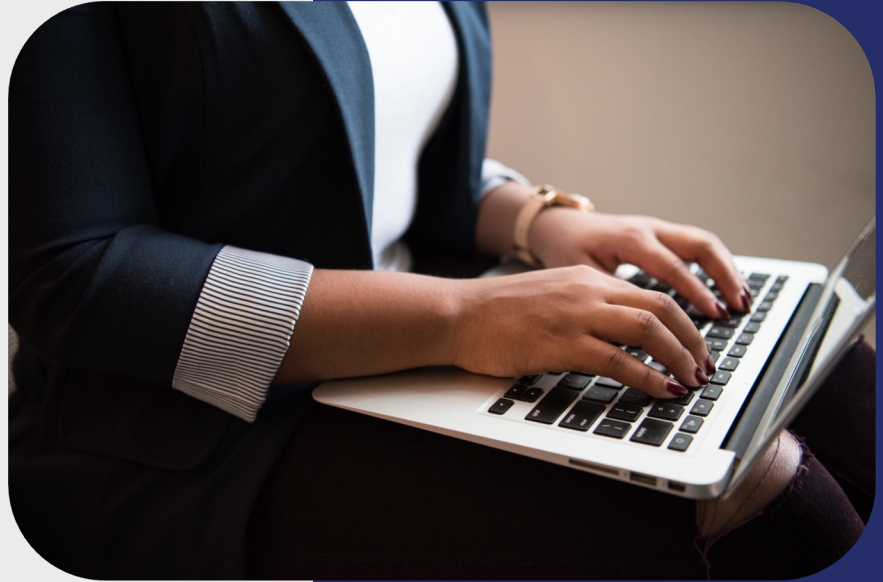


3. Perception of Risk



Perception of Risk

- Donors want to avoid risk
- Donors like to spread risk out
- Local networks/Local projects “feel” risky
- Non-traditional models
- Non-traditional actors
- Learn to speak their language & vice-versa
- Find a “stack” of donors/capital partners
- Take a blended finance/impact investment approach to partners
- Model your project, beta test (think of the new Alliance approach)



4. Deploying Local Networks

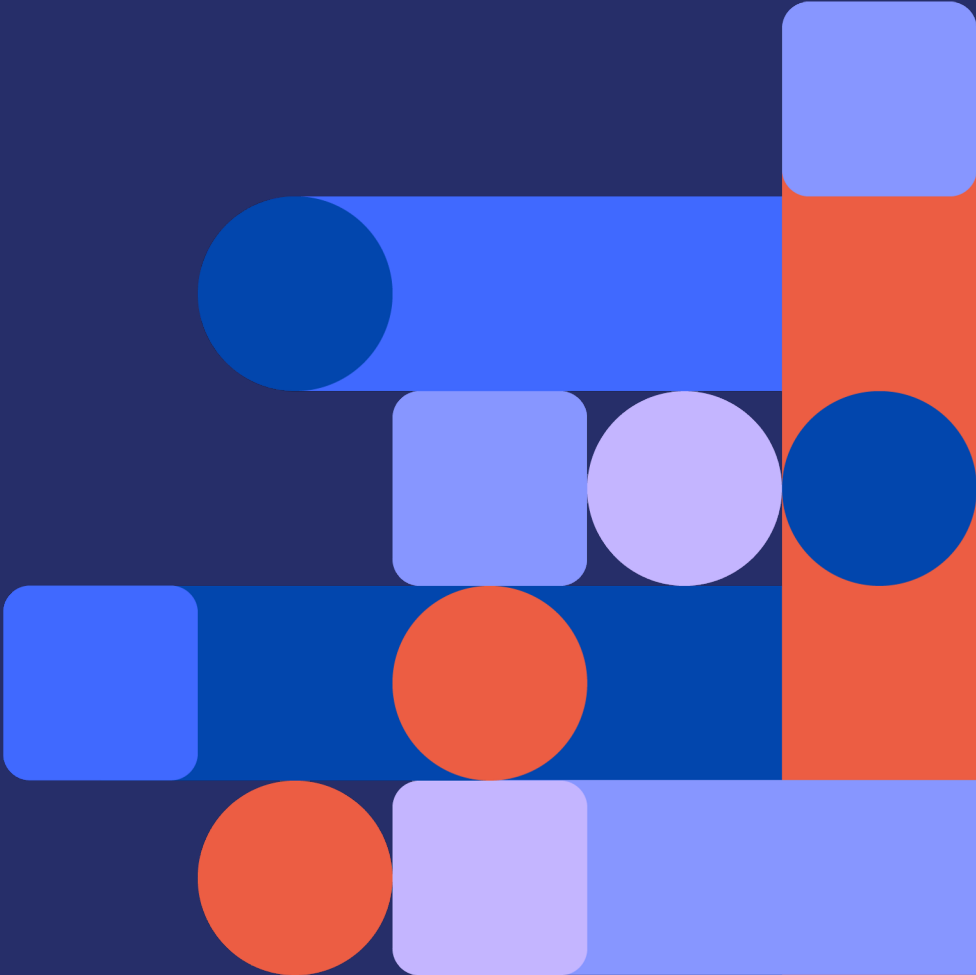


Deploying Local Networks

- Know the community and region
- Know the power players
- Map the environment (Outcome Mapping ala IDRC)
- Understand what community wants
- “You can’t mobilize what you have not organized”
- Work with existing partners, network developers, donors
- Make sure you practice your pitch to donors
- 2-3 Years of Funding to Start
- TIME – talk to people about net deployment realities
- DOCUMENT your work – MERL, Social Media, constant contact
- Contact with donors, contact with community, contact with Govt
- Capacity Development - key for local sustainability and impact

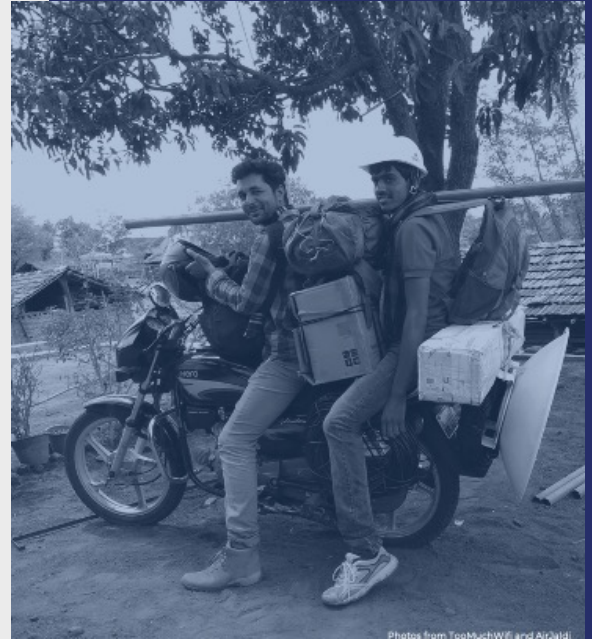


5. Capacity Development



Capacity Development

- Know the community and region
- Know the power players
- Conduct a Community Readiness Assessment
- Conduct a Local Skills Assessment
- Understand how local people "learn"/sensitivity to local practices
- Set up Capacity Development Program
- You must document what you learn as you go
- TIME – it takes time to layer information and practical learning
- Record sessions (if appropriate) for people to go back and listen
- Local-local training – sustainability, local trust, local innovation



Photos from TooMuchWiFi and AirZaidi

Thank you for your attention!

6. Wrap-up & Questions

