



Building Cross-Border ISP Networks in East Africa Navigating Challenges

By: BARRY MACHARIA – RAIN COMMUNICATIONS LIMITED

The Core Challenge: Closed Markets & Interconnection

Heading: The Peering Dilemma: No Easy Entry

Problem: Incumbent operators often control the national internet gateway.

Graphic: A simple graphic showing a foreign ISP trying to connect to a local network but being blocked by a wall labeled "No Peering."

Key Points:

Lack of Neutral IXPs: Forces ISPs to buy expensive transit from competitors instead of efficient peering.

Asymmetric Traffic Fees: Risk of being charged to deliver international capacity.

Result: High costs and uncompetitive pricing, creating a "closed" market.

The Regulatory Maze

Heading: Permits, Policies, and Protectionism

- Problem: A fragmented regulatory landscape creates immense delays and uncertainty.
- Graphic: A map of East Africa with different icons (checkmarks, X's, warning signs) over each country.
- Key Points:
 - Non-Harmonized Licensing: Different ISP licenses, fees, and local ownership rules in each country.
 - Right-of-Way (RoW) Hurdles: Slow, costly, and bureaucratic process to get digging permits across multiple jurisdictions.
 - Customs Delays: Critical network equipment held up at borders, stalling projects.



Physical & Financial Risks

Infrastructure Vulnerabilities and Economic Reality •

- Problem: High investment meets high operational risk.
- Graphic: An image of a fiber optic cable with a red "cut" mark through it, next to a chart showing currency exchange fluctuations.

Problem 01

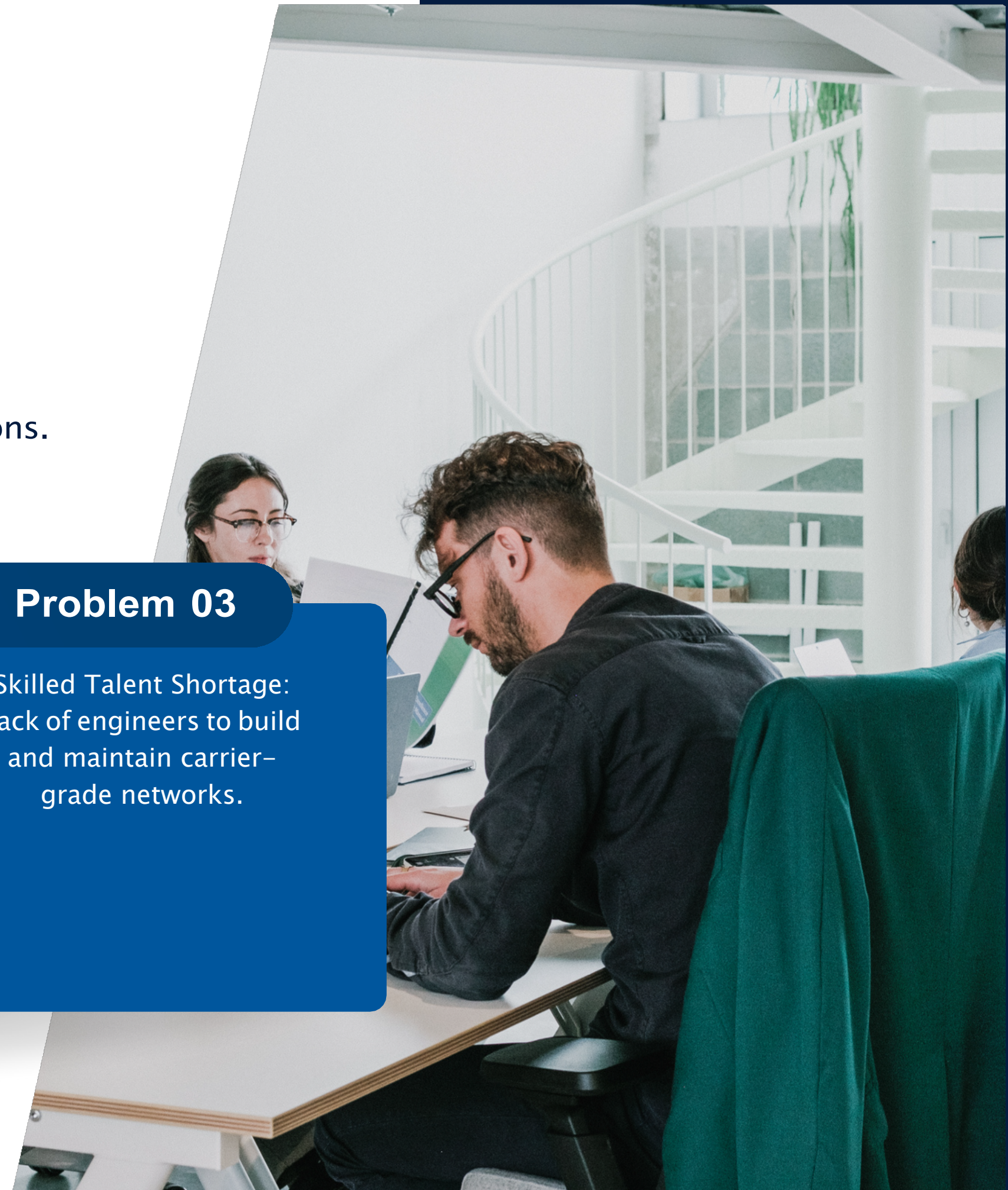
Fiber Cuts: Single point of failure on vulnerable routes (construction, theft).

Problem 02

Forex Risk: Revenue in local currencies vs. USD-denominated debt and costs.

Problem 03

Skilled Talent Shortage: Lack of engineers to build and maintain carrier-grade networks.



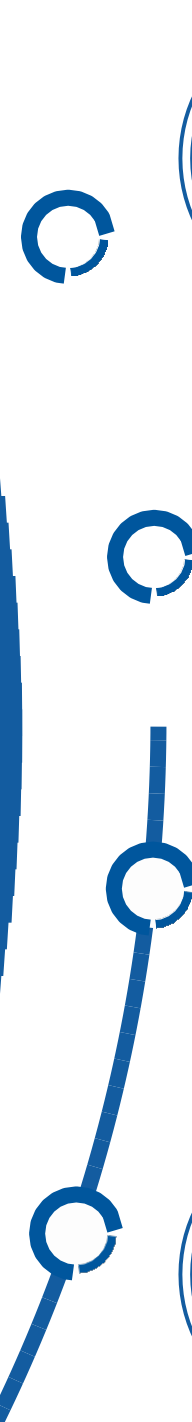
Conclusion: The Path Forward

Heading: Overcoming the Hurdles

Summary: Success requires more than just laying cable; it demands strategy and advocacy.

- Graphic: A path leading from icons of challenges to icons of solutions (partnerships, advocacy, niche focus).
- Recommendations:
 - a. Specialize: Target high-value enterprise clients, not the mass market.
 - b. Partner: Ally with local ISPs for last-mile access.
 - c. Advocate: Lobby for Open Access policies and Neutral IXPs via the EAC.
Innovate: Use wireless/wireline mixes for redundancy.

Final Message: The potential for a connected East Africa is immense, but unlocking it requires tackling these interconnected challenges head-on. Despite these challenges, the opportunity is vast. Success requires a specific strategy:

- 
- 01** Specialize in a Niche: Focus on underserved high-value clients like multinational corporations, banks, NGOs, and other ISPs who need reliable, low-latency international connectivity, rather than trying to compete with telcos for mass-market mobile users.
 - 02** Advocate for Open Access: Lobby regional bodies like the EAC for regulations that mandate open access to national backbones and promote the development of neutral IXPs.
 - 03** Form Strategic Alliances: Partner with local ISPs in target countries instead of building a full last-mile network. You provide the international "backbone," they provide the local "access."
 - 04** Leverage Innovative Technologies: A lot of fiber is under used in the region