A Policy Framework for Enabling Internet Access

How to bring Internet access to everyone, everywhere.

Internet Society

The Importance of Internet Access

- By providing Internet access to crucial business inputs, such as capital, legal, financial and accounting services, countries are able to better compete globally.

- The Internet helps firms to sell goods and services to consumers overseas by bypassing traditional trade barriers, such as inefficient customs procedures and poor transportation infrastructure.

- The Internet can serve as a tool for conducting market research, strategic analytics, and putting businesses in touch with customers globally

- Access to technical expertise and information can help improve the agricultural sector, which employs about 40 percent of the workforce in many developing countries.

- The Internet can also be a source of finance, helping overcome the limited financial options from domestic capital markets.
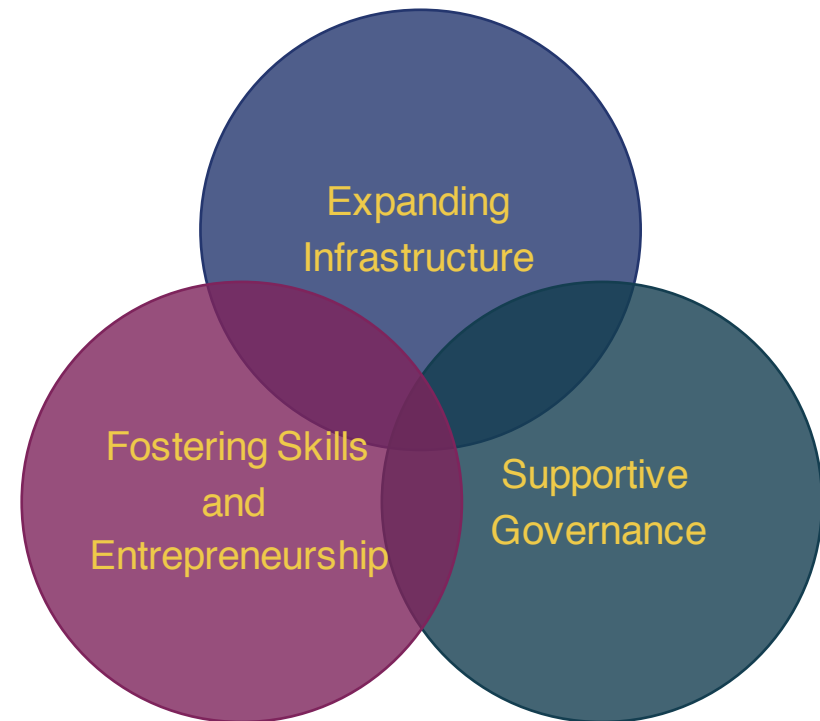
Connecting the unconnected

There are two gaps in Internet adoption that need to be addressed:

– How to extend Internet access to people not currently covered by Internet infrastructure?

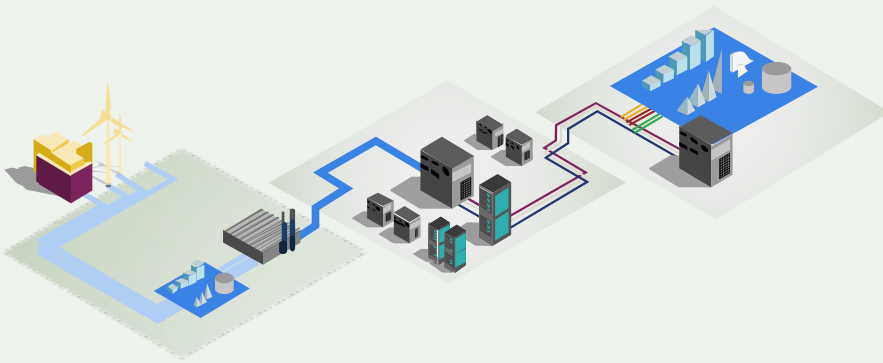– How to attract online those who could access the Internet, but choose not to?

Enabling environments are built with the collaboration of multiple stakeholder groups.

Interrelated policy areas

Expanding Infrastructure

Fostering Skills and Entrepreneurship

Supportive Governance

Expanding access infrastructure

Policies to promote access infrastructure must address the entire network, from international connectivity to the last-mile connection that enables users to go online.

- **Remove barriers** to investment and competition;
- Promote open access, and create **transparent and affordable licensing processes and procedures** at all levels of infrastructure;
- **Work collaboratively** with neighboring governments to harmonize and coordinate regional cross-border interconnection and licensing regimes;
- **Price rights-of-way access at cost** and encourage dig-once policies;
- Ensure adequate wireless **spectrum is available**;
- **Support community-based access initiatives**;
- **Avoid burdensome taxes** on end-user services and devices which stifle demand; and,
- Ensure policies are flexible and **technology neutral**.

Supporting local content and traffic exchange

Locally relevant content and useful services boost demand for the Internet, and locally hosted content tends to load faster and more smoothly.

– **Design online services to serve citizens** and drive use;
– Connect e-government services to local IXPs;
– Ensure **legal and policy clarity** for local content developers, hosting providers, CDNs, and data centres;
– Where appropriate, **mitigate electricity costs** to local ISPs, IXPs, hosting providers, and data centres;
– Consider the **impact of long customs checks and high duties and taxes** on equipment imports;
– Avoid mandating a requirement for local hosting of content or data. Instead, promote an environment which will **make local hosting a viable option**; and
– **Remove barriers to entry** for IXP operation and peering.

Fostering skills and entrepreneurship

A strong local ecosystem of skilled, trained, and engaged people who can create, sustain, and maintain infrastructure and online content is critical to the development of the Internet.

- **Support capacity building** by introducing appropriate classes on IT engineering and programming throughout the educational system.
- Provide **general Internet skills training** to both current Internet users and those yet to go online.
- **Facilitate local innovation and entrepreneurship** through innovation hubs, and have balanced finance, taxation, and intellectual property protection policies.
- Ensure that local data centers, hosting providers, and content developers are considered in government procurement processes so they can **build local experience**.
- Encourage all access and content providers in the country to **participate in community-driven peering**, interconnection, and IXP discussions.

Supporting an enabling environment for Internet use and investment

Political Leadership	Multi-Stakeholder Approach	Legal Certainty	Domestic Procurement Preference	Regulatory Reform
Collaborative Security Approach	Critical Infrastructure Improvements	Favorable Investment Climate	Domestic Payment System	Fair Taxation

The Rwanda Experience

- For many countries, including Rwanda, the majority of content accessed by local users is hosted abroad, mainly in the US and in Europe.

- One Rwandan web developer reported that they saved over USD $100 per year by hosting overseas.

- This resulted in a cost of over USD $10,000 for ISPs to deliver the content back to users in Rwanda.

- It also took over 30 times longer for users to download compared to locally accessible content.

- Akamai, a commercial content delivery network, began providing content in Rwanda through a local cache. Data showed that demand doubled within 3 months because it loaded faster.

- A Google Global Cache placed in Rwanda helped increase local traffic exchange by fourfold.

Promoting Local Content Hosting to Develop the Internet Ecosystem, 2015 http://www.internetsociety.org/doc/promoting-local-content- hosting-develop-internet-ecosystem

Afghanistan Case Study

- Afghanistan shows quite clearly the potential for mobile payments and mobile money as well as the challenges.

- M-Paisa, a joint venture payments service provider between Afghanistan's biggest telco Roshan and Britain's Vodafone, was introduced in the country in 2009 as a trial to pay the Afghan national policy with mobile money instead of cash.

- Direct electronic payments meant that middlemen were no longer able to skim cash from legitimate salaries.

- Mobile payments also resolved the security risk of transporting large amounts of cash.

- By 2013, M-Paisa had more than 1.2 million subscribers.

- Western Union has also signed an agreement with Roshan to enable international money transfers to be sent directly to M-Paisa mobile subscribers in Afghanistan.

- M-Paisa has also created the opportunity for government and NGOs to distribute aid directly to Afghanis.

Unleashing the potential of the Internet in Central Asia, South Asia, the Caucasus and Beyond, http://www.unescap.org/sites/default/files/Publication Unleashing%20the%20potential%20of%20internet%20in%20CA_0.pdf

Thank you.

Read the policy framework:

www.internetsociety.org/doc/policy-framework-enabling-internet-access

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