

# **Last-Mile Internet Connectivity**

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Jessica Scranton/FHI 360

# CONSCIENTIOUS DEPLOYMENTS

Over four billion people — half of the world population — remain unconnected, including 93 percent of households in the least developed countries.

### THE DIGITAL OPPORTUNITY

Internet connectivity has the potential to benefit every aspect of human development. Access to web-based goods and services has already improved outcomes in health, education, civil society, governance, agriculture, and economic growth.

#### **INNOVATIVE BUSINESS MODELS**

FHI 360 digital development experts have served as technical leaders, industry conveners, and global implementers of projects that accelerate and expand equitable access to the internet and other information and communication technologies (ICTs) for over two decades. Under the USAID Mobile Solutions, Technical Assistance and Research (mSTAR) project, FHI 360 staff have published research, designed dozens of ICT4D programs with a combined value of over \$25 million, and produced strategy documents on business models for digital inclusion. To develop these models, we have built expertise in four critical areas:

# 1 Researching Market-Based Solutions for Rural Connectivity In 2013, FHI 360 conducted a landscape assessment on novel approaches and investment recommendations on last-mile connectivity for the first USAID Mobile Access (mAccess) team. The resulting Mobile Access Landscape Assessment provided critical inputs into USAID's strategy for catalyzing digital access.

FHI 360 has been dedicated to producing and disseminating knowledge on access technologies and their commercial viability. In 2016, FHI 360 published



About FHI 360: FHI 360 is a nonprofit human development organization dedicated to improving lives in lasting ways by advancing integrated, locally driven solutions. Our staff includes experts in health, education, nutrition, environment, economic development, civil society, gender, youth, research, technology, communication and social marketing — creating a unique mix of capabilities to address today's interrelated development challenges. FHI 360 serves more than 70 countries and all U.S. states and territories.

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Business Models for the Last Billion: Market Approaches to Increasing Internet Connectivity (see text box), and in 2017, FHI 360 produced an internal report for USAID on Financing Last-Mile Connectivity, which assessed market opportunities for alternative last-mile connectivity models (e.g., wholesale models, paid and ad-sponsored WiFi and community networks) and identified key constraints to investment in last-mile connectivity.

## 2 Bridging the Digital Divide

FHI 36O has developed a suite of resources and toolkits on addressing the digital divide for researchers, practitioners, and investors. Our **mAccess Diagnostic Tool** (developed for and used by USAID, DfID, SIDA and the Gates Foundation) provides curated data points critical to understanding local mobile ecosystems and the potential of mobile technology for development programming. Our **Mobile Access and Usage Survey** (DfID and USAID, 2016) studied user behaviors and identified ways that Mozambicans use mobile technology, and opportunities for donors and industry investment.

## **3** Cross-Sector Knowledge and Solutions

FHI 360 works with development sector experts around the world to build evidence bases and models for how connectivity can amplify and extend development initiatives across governance, health and education. In **Rwanda**, FHI 360 supported the Mentorship Community of Practice (MCOP) project to negotiate subsidized connectivity rates for educators with the government and local mobile network operators, making Web-based channels a viable means for connecting educators.

In 2018, FHI 360 completed a cutting-edge landscaping exercise focused on investors in the last-mile connectivity space. This work identified a large number of investors who have invested, or who are interested in investing in last-mile opportunities. The list will be shared with investors and entrepreneurs alike, as FHI 360 continues to facilitate connections between the two groups, with an aim to help establish commercially-sustainable internet access globally. FHI 360 is currently adding to this work with research into KPIs that simultaneously address the reporting needs of traditional and social-impact investors.

# 4 Cross-Industry Facilitation and Leadership

FHI 360 has supported white-boarding sessions across Asia, Africa, and North America, which brought together entrepreneurs, investors, donors and industry to discuss connectivity challenges. In 2014, FHI 360 engaged with MIT to design and coordinate a special issue on digital inclusion (https://mitpressjournals.org/user images/ContentEditor/1415302178306/INNOVATIONS\_DIGITAL-INCLUSION.pdf) in the journal innovations. FHI 360 facilitated a collaboration between USAID, academia, industry and non-profits to feature cases authored by leading academics, globally recognized executives and political leaders.

FHI 360 continues to build bridges with private sector partners who share the goal of connecting the unconnected, and had been recognized as possessing of technical expertise by the Telecom Infra Project (TIP), TowerXchange, the World Economic Forum (WEF), GSMA and others.