Applying Digital Tools to Support the Journey to Self-Reliance

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Training Objectives

• Assess the latest research on the impact of Digital Development across sectors of development using selected cases.

• Align USAID’s Digital Strategy with the Journey to Self-Reliance development metrics, evaluating selected Country Roadmaps.

• Identify, using the Digital Strategy concept of a digital ecosystem, practical steps for applying digital technology in development programming.
Welcome! Your Presenters Are

Mary Jane C. Parmentier

I’m from:

My job is:

Technology device or other item I don’t want to part with:
Welcome! Your Presenters Are

Faheem Hussain

I’m from:

My job is:

Technology device or other item I don’t want to part with:
Hello
my name is

Awesome Participant

I’m from:

My job is:

Technology/item I don’t want to part with:
Key Concepts for Today’s Discussions

What is development?
What is self-reliance?
What are digital technologies?
What is Development?
USAID Journey to Self-Reliance

Commitment Metrics

• Open and accountable government
• Inclusive development (gender)
• Policies: trade, business environment, environmental protection
USAID Journey to Self-Reliance

Capacity Metrics

• Government services: effectiveness, tax administration, security
• Civil society and media
• Citizens: education, health, poverty
• Economy: PPP, ICT usage, export diversity
USAID’s Digital Strategy: the platforms, processes, and range of technologies that underpin modern information and communications technologies (ICT), including the internet and mobile phone platforms, as well as advanced data infrastructure and analytical approaches.
Digital Technologies

Encompasses a wide range of multimedia and communication tools including:

✔ New media networks (fixed or wireless Internet), hardware (computers, mobile phones, tablets, etc.)

✔ Software (social media services, multi-media applications, mobile applications, etc.)

✔ Interfaces with old media such as radio, television and telephone

DIGITAL AROUND THE WORLD IN 2019
THE ESSENTIAL HEADLINE DATA YOU NEED TO UNDERSTAND GLOBAL MOBILE, INTERNET, AND SOCIAL MEDIA USE

TOTAL POPULATION
7.676 BILLION
URBANISATION: 56%

UNIQUE MOBILE USERS
5.112 BILLION
PENETRATION: 67%

INTERNET USERS
4.388 BILLION
PENETRATION: 57%

ACTIVE SOCIAL MEDIA USERS
3.484 BILLION
PENETRATION: 45%

MOBILE SOCIAL MEDIA USERS
3.256 BILLION
PENETRATION: 42%

INTERNET PENETRATION BY REGION

INTERNET USE BY REGION, COMPARING THE NUMBER OF INTERNET USERS TO TOTAL POPULATION (REGARDLESS OF AGE)

NORTH AMERICA: 95%
CENTRAL AMERICA: 63%
SOUTHERN AMERICA: 73%
NORTHERN AMERICA: 95%
CARIBBEAN: 51%
NORTHERN AFRICA: 50%
WESTERN AFRICA: 41%
SOUTHERN AFRICA: 12%
MIDDLE AFRICA: 32%
WESTERN ASIA: 42%
SOUTHERN ASIA: 66%
EASTERN ASIA: 60%
SOUTH-EASTERN ASIA: 63%
EASTERN EUROPE: 80%
NORTHERN EUROPE: 95%
WESTERN EUROPE: 94%
SOUTHERN EUROPE: 88%
MIDDLE EAST: 50%
CENRAL ASIA: 50%
OCEANIA: 69%

SOURCES: INTERNETWORLDSSTATS, ITU, WORLD BANK, CIA WORLD FACTBOOK, EUROSTAT, LOCAL GOVERNMENT BODIES AND REGULATORY AUTHORITIES, MIDDEASTMEDIA.ORG; REPORTS IN REPUTABLE MEDIA, SOCIAL MEDIA PLATFORM USER NUMBERS. NOTE: PENETRATION FIGURES ARE BASED ON TOTAL POPULATION, REGARDLESS OF AGE. REGIONS AS DEFINED BY THE UNITED NATIONS GEOSCHME.
### Internet Growth Rankings: Absolute Growth

**Based on the year-on-year change in the total number of Internet users in countries/territories with populations over 50,000**

<table>
<thead>
<tr>
<th>#</th>
<th>Largest Absolute Growth</th>
<th>▲ Users</th>
<th>▲ %</th>
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</thead>
<tbody>
<tr>
<td>01</td>
<td>INDIA</td>
<td>+97,885,011</td>
<td>+21%</td>
</tr>
<tr>
<td>02</td>
<td>CHINA</td>
<td>+50,666,155</td>
<td>+6.7%</td>
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<tr>
<td>03</td>
<td>U.S.A.</td>
<td>+25,379,895</td>
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<tr>
<td>04</td>
<td>INDONESIA</td>
<td>+17,300,000</td>
<td>+13%</td>
</tr>
<tr>
<td>05</td>
<td>IRAN</td>
<td>+16,241,877</td>
<td>+29%</td>
</tr>
<tr>
<td>06</td>
<td>UKRAINE</td>
<td>+15,325,054</td>
<td>+60%</td>
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<td>07</td>
<td>TANZANIA</td>
<td>+14,560,898</td>
<td>+173%</td>
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<td>08</td>
<td>ITALY</td>
<td>+11,490,731</td>
<td>+27%</td>
</tr>
<tr>
<td>09</td>
<td>BANGLADESH</td>
<td>+10,158,000</td>
<td>+12%</td>
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<tr>
<td>10</td>
<td>BRAZIL</td>
<td>+9,946,450</td>
<td>+7.2%</td>
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<tbody>
<tr>
<td>11</td>
<td>PHILIPPINES</td>
<td>+9,000,000</td>
<td>+13%</td>
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<tr>
<td>12</td>
<td>ARGENTINA</td>
<td>+6,801,754</td>
<td>+20%</td>
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<tr>
<td>13</td>
<td>AFGHANISTAN</td>
<td>+5,694,586</td>
<td>+142%</td>
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<tr>
<td>14</td>
<td>TURKEY</td>
<td>+5,027,251</td>
<td>+9.3%</td>
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<tr>
<td>15</td>
<td>CÔTE D’IVOIRE</td>
<td>+4,529,978</td>
<td>+69%</td>
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<tr>
<td>16</td>
<td>CAMBODIA</td>
<td>+4,500,000</td>
<td>+56%</td>
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<tr>
<td>17</td>
<td>GERMANY</td>
<td>+4,322,056</td>
<td>+5.8%</td>
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<tr>
<td>18</td>
<td>NIGERIA</td>
<td>+3,572,903</td>
<td>+3.8%</td>
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<tr>
<td>19</td>
<td>SPAIN</td>
<td>+3,541,726</td>
<td>+9.0%</td>
</tr>
<tr>
<td>20</td>
<td>ALGERIA</td>
<td>+3,484,731</td>
<td>+17%</td>
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</tbody>
</table>

**Sources:** InternetWorldStats; ITU; World Bank; CIA World Factbook; Eurostat; Local Government Bodies and Regulatory Authorities; MideastMedia.org; Reports in reputable media; Social Media Platform User Numbers. **Note:** Growth figures based on data in We Are Social & Hootsuite’s “Digital 2018” reports.
Digital Interventions for Development and Self-Reliance in USAID Sectors

- Agricultural and Food Security
- Democracy, Human Rights and Governance
- Economic Growth and Trade
- Education
  - Climate and Environmental Protection
  - Gender Equality and Women’s Empowerment
  - Global Health
  - Water and Sanitation
Activity 1: Participant Experiences

Begin to fill in the worksheet on digital development, self-reliance, and risks, based on in-session discussions and presented cases.
Agricultural and Food Security

Mobile phones can facilitate and improve
- Exchange information within interpersonal networks
- Farmers’ access to information
- Coordination of input and output supply chains
- Data collection and linkages with the research sector,
- Farmers’ access to financial services
Agricultural and Food Security

Also:
- IoT and Sensors in the Field
- Drones and Crop Monitoring
- RFID Sensors and Tracking
- Machine Learning and Analytics

However,
- Human-Computer Interaction (HCI) focuses heavily on users’ interaction and experience with a given technology, at times ignoring the other key issues
- Agricultural agents need access to related markets
- Failing to measure demand, usage, cost effectiveness, and mechanisms
Democracy, Human Rights and Governance

- Access to information
- Political activism in the Age of Social Media
- "Arab Spring"- the Power of Networking
- E & M-Governance
- Active access to minorities, LGBTQ+


Democracy, Human Rights and Governance

Risks

- Controlling the Information: The Great Information Wall of China
- Fake “News”
- Gender Disparity
- Breach of Privacy


Economic Growth and Trade

- Access to Finance (e.g. Mobile Banking)
  - Money transactions very popular all over Africa and South Asia
  - M-Pesa gained the confidence of millions of African women, and thousands of women entrepreneurs from that continent
  - Avoids the administrative delays, overhead costs, and physical challenges of travelling to not so friendly places

- Crowd Funding

- Better Business Communication
Things may not workout due to:

- Lack of Education
- Challenges with Access, Security
- Disconnected Applications
- Exclusion of the minorities, under-represented populations
- Gender-based inequalities
Education

• Empowering learners
• ICTs as effective education tools
• Transcending geopolitical boundaries
• MOOCs
• Education management
• Beyond traditional classrooms

Education

Risks

- Absence of proper content
- Operations and maintenance
- Lack of teachers
- Discriminations against women, minorities
- Disconnected designs, applications
- Hardware centered policies


Climate and Environmental Protection

ICT Solutions for Adaptation, Mitigation, and Resilience

Using ICTs for Sustainability Across Sectors

Smart ICT applications can:

- Increase agricultural crop yields by 30%, save over 300 trillion liters of water, and save 25 billion barrels of oil a year
- By 2030, 2.5 billion more people connected to ICT services and 2 Giga-tons of CO2 saved across business sectors
Climate and Environmental Protection

Risks

- Proliferation of E-waste
- Digital Divide
- Bypassing the traditional knowledge/practices
Gender Equality and Women’s Empowerment

Digital Development

• Enhanced communication and access to information
• Improves access to public services
• Provides opportunities for socio-economic participation
• Provides opportunities for online political participation

Risks

➢ Digital divide
➢ High cost of ICT infrastructure
➢ Online violence against women
➢ Poor enforcement of ICT policies, cyber laws


Gender Equality and Women’s Empowerment, continued

Usaha Wanita Mobile Service in Indonesia

- Help women entrepreneurs
  - Mobile app with essential business tips and market information
  - Business capacity building training delivered for 2,000 women

- Women reached
  - 14,000 + in Indonesia
  - 100,000 + in Nigeria and Tanzania

- Won 2013 Best Consumer Innovation Award
- Usaha Wanita complements Info Wanita

Global Health

• Digitizing and standardizing Health Information Systems
• Mobile healthcare solutions for the disconnected and underserved population
• Connection between the BoPs and state of the art solutions

Risks

➢ Lack of infrastructure, human resources
➢ Reinvention of the wheel, multiple concurrent health systems
➢ Absence of effective and inclusive e-health policies
➢ Compromised privacy

Water and Sanitation

• Mobile phone prepayment for household water connections
• Positioning WASH services within a systems framework and demonstrating achievement of open defecation free status at scale
• Real-time monitoring for improved water services
• Geographical Information Systems in WASH development
Overall Risks

• Dependence on foreign networks and companies
• Exacerbating uneven development and inequality
• Threats to governments
• Multiple entities implementing *Digital Development* without coordination
• Cybercrime and privacy threats
• Risk mitigation – close ‘design-reality gaps’
• Spread of hate speech and violent extremism
• Misinformation and disinformation
Activity 2: Participant Experiences

Complete the worksheet on digital development, self-reliance, and risks, based on in-session discussions and presented cases
Commitment Metrics

- Open and accountable government
- Inclusive development (gender)
- Policies: trade, business environment, environmental protection

Capacity Metrics

- Government services: effectiveness, tax administration, security
- Civil society and media
- Citizens: education, health, poverty
- Economy: PPP, Digital Development use, export diversity
# USAID Self-Reliance Metrics for Capacity

## The Self-Reliance Metrics & Country Roadmaps

<table>
<thead>
<tr>
<th>About</th>
<th>Metrics</th>
<th>Purpose</th>
<th>FAQs</th>
<th>Methodology</th>
<th>Resources</th>
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<tbody>
<tr>
<td></td>
<td>CIVIL SOCIETY CAPACITY</td>
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<td></td>
<td>Civil Society &amp; Media Effectiveness</td>
<td>Measures the range of actions and mechanisms that citizens, civil society organizations, and an independent media can use to hold a government accountable. The mechanisms include using informal tools such as social mobilization and investigative journalism. Source: <em>Varieties of Democracy (V-Dem), Diagonal Accountability Index</em></td>
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<td>CITIZEN CAPACITY</td>
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<td>Poverty Rate ($/Day)</td>
<td>Measures the percent of the population living under $3/day in purchasing power parity (PPP) terms. Source: <em>World Bank, PovCalNet</em></td>
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<td>Education Quality</td>
<td>Measures the percentage of students attaining a minimum proficiency in reading toward the end of primary school, providing a comparative evaluation of the relative performance of educational systems across countries. Source: <em>World Bank</em></td>
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<td>Child Health</td>
<td>A composite measure that aggregates under-5 child mortality, access to improved water sources, and access to improved sanitation facilities. Source: <em>Columbia University Center for International Earth Science Information Network (CIESIN)</em></td>
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<td></td>
<td>CAPACITY OF THE ECONOMY</td>
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<td></td>
<td>GDP Per Capita (PPP)</td>
<td>Measures the flow of resources available to households, firms, and government to finance development as the country’s total Gross Domestic Product (PPP) divided by the country’s population. Source: <em>World Bank, World Development Indicators</em></td>
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<td>Information &amp; Communication Technology (ICT) Use Index comprising: (1) internet users as percent of population; (2) fixed-broadband internet subscriptions per 100 population; (3) internet bandwidth kbps/user; (4) mobile broadband subscriptions per 100 population; (5) mobile telephone subscriptions per 100 population; and (6) fixed telephone lines per 100 population. Source: <em>World Economic Forum (WEF), Global Competitiveness Index</em></td>
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<td></td>
<td>Export Diversification</td>
<td>Measures the diversification of a country’s export products, one marker that can help gauge economic sophistication and resilience. Source: <em>UNCTAD, Export Concentration Index</em></td>
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Bangladesh Country Roadmap

**Commitment**

The degree to which a country’s laws, policies, actions, and informal governance mechanisms - such as cultures and norms - support progress towards self-reliance.

**Capacity**

How far a country has come in its ability to manage its own development journey across the dimensions of political, social, and economic development, including the ability to work across these sectors.

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October 2019
Find your country roadmap!  https://selfreliance.usaid.gov/
Activity 3: JSR Country Roadmaps and Digital Developments

• Analyze Journey to Self-Reliance Country Roadmaps

• Identify and share applications of Digital Developments to areas of Capacity and Commitment
Mapping and Assessing a Country’s Digital Ecosystem

- **Technology Sector**
  - Digital communication platforms & networks
  - Providers and costs
  - Privacy and security
  - Access, human capacity, and equity

- **Energy Infrastructure to support Digital Development**
  - Extent of electrification
  - Renewable energy sources
  - Geographical challenges

- **Government**
  - Ownership
  - Policies (FDI, internet regulation, access)
  - Digital Development support across sectors

- **External Factors**
  - Regional organizations
  - Foreign governments
  - Non-governmental organizations
  - Foreign companies
Mapping a Country’s Digital Ecosystem Activity

• Technology Sector
  o What is the nature of the local digital technology sector?
  o What is the overall level of digital literacy (in government, private sector, key populations, etc.)?
  o How does technology access and use differ by gender, geographic, ethnic, linguistic, or other groups?
  o Which areas of the country are covered by cellular networks (3G, 4G, and possibly 5G)?
  o What are the rates of cell phone ownership and use?
  o How many people use the internet? Social media?

• Energy Infrastructure to support Digital Development
  o What is the nature local energy infrastructure supporting digital services?
  o What are the energy access disparities across geographic, ethnic, linguistic, or other groups?
Mapping a Country’s Digital Ecosystem Activity

• **Government**
  o What policies exist to protect individual privacy and speech online?
  o What risks exist with regard to cybersecurity, surveillance, or digital manipulation?
  o What are the current government and private-sector strategies for expanding access and use?
  o Are there any tax incentives for digital service providers? How affordable are internet and mobile access relative to local incomes?

• **External Factors**
  o What digital-focused activities comes from outside donor funding?
  o Are the donors/NGOs/development agencies/multinational companies allowed to work in the digital service space? Are they coordinated?
— Activity 4:  Digital Tools and the Journey to Self-Reliance

• **Part I:** Map country digital ecosystems

• **Part II:** Design digital development strategy to strengthen a selected metric Journey to Self-Reliance

• **Conclusion:** Present maps and *Digital Development* strategies
Program Conclusion and Feedback