USE CASE STUDY

Leveraging Data Through Partnerships

The United States Agency for International Development (USAID)

A Product of the Federal CIO Council Innovation Committee

VERSION 1.0 / 2015

Envisioning the End of Extreme Poverty

USAID's Mission: *We partner to end extreme poverty and to promote resilient, democratic societies while advancing our security and prosperity*

USAID carries out U.S. foreign policy by promoting broad-scale human progress at the same time it expands stable, free societies, creates markets and trade partners, and fosters good will abroad.

USAID is a data-driven and evidence-based Agency with an abundant amount of data on international development programs from a diverse set of partners.

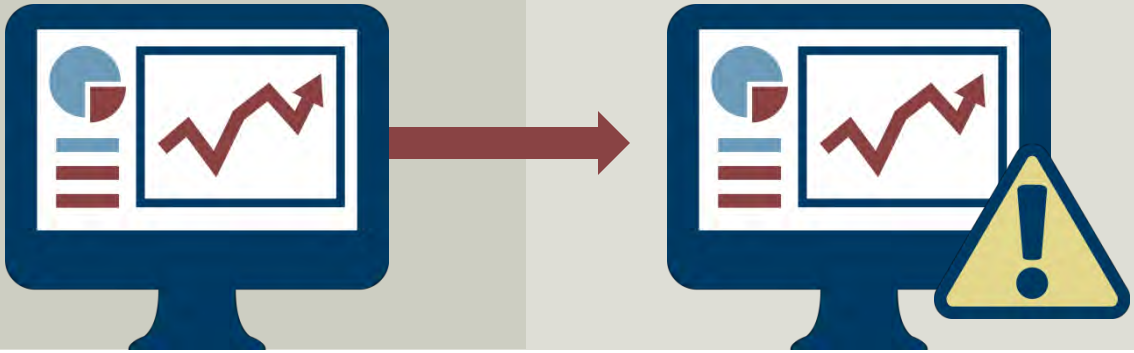
USAID accelerates human progress in developing countries by:

- Promoting broadly shared ***economic prosperity***
- Strengthening ***democracy and good governance***
- Protecting ***human rights***
- Improving ***global health***
- Advancing ***food security and agriculture***
- Improving ***environment sustainability***
- Furthering ***education***
- Helping societies ***prevent and recover from conflicts***
- Providing ***humanitarian assistance*** in the wake of natural and man-made disasters

Data Driven Decisions

To gather and open data from its expansive partnerships, USAID recognized the need for comprehensive changes to its business processes and technology infrastructure

USAID has many partners…	with whom it exchanges data…	resulting in several challenges…
U.S. Agencies **Multilateral Organizations** **Non-Governmental Organizations (NGO)** **Private Sector** **Research Institutions** **Faith Based Organizations** **Civil Society Organizations**	• Program Data • Performance Data • Evaluation Data • Research Data • Geospatial, Mobile, and Real-time Data • Financial Data	• Varying data formats and structures • Multiple data reporting requirements based on legislation • Various data collection methods • Varying data collection and reporting intervals



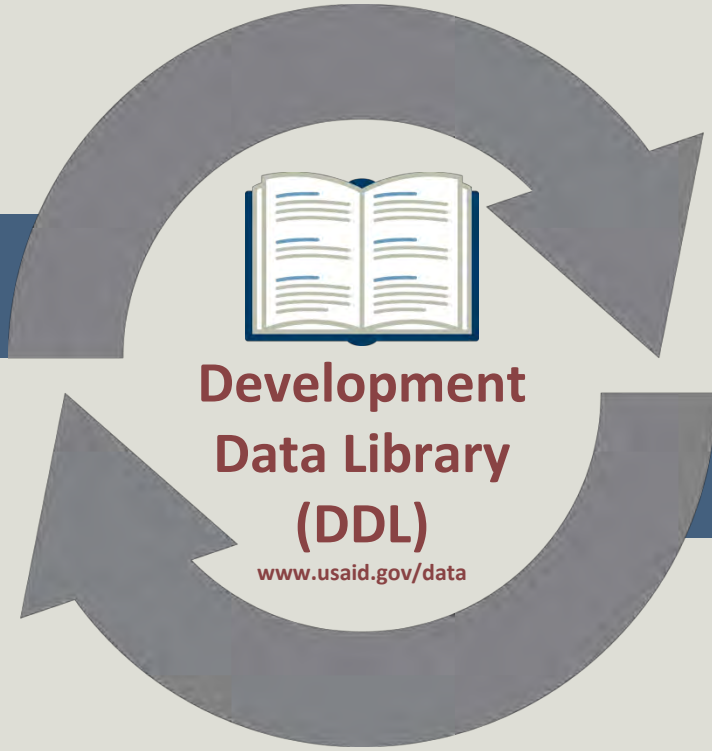
Working as One

USAID established its first-ever open data policy and the Development Data Library, creating a framework that enables its partners to share valuable data on international development

By embedding data submission requirements into its awards, USAID receives a steady stream of data from its worldwide programs, which it can then release to the public.

USAID

- Create policy framework with roles and responsibilities
- Establish procurement requirements for data submissions
- Manage data publication and privacy protection
- Socialize policy requirements among staff and partners



IMPLEMENTING PARTNERS

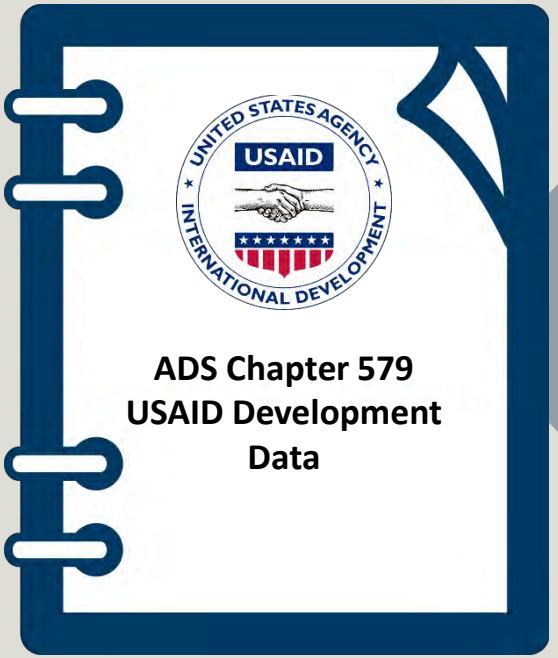
- Collect data from USAID funded projects
- Add metadata per DDL requirements
- Document and submit data to the DDL
- Develop APIs where appropriate

A New Policy Framework

By embedding data submission requirements into its awards, USAID receives a steady stream of data from its projects worldwide, which it can then release to the public

USAID's policy on Development Data (Automated Directives System 579) was released in October 2014 which *"paves the way for USAID and its partners to draw from an increasingly robust, data-rich environment to create breakthrough insights and solutions in support of [its] mission."*

Key Elements to USAID's Open Data Policy



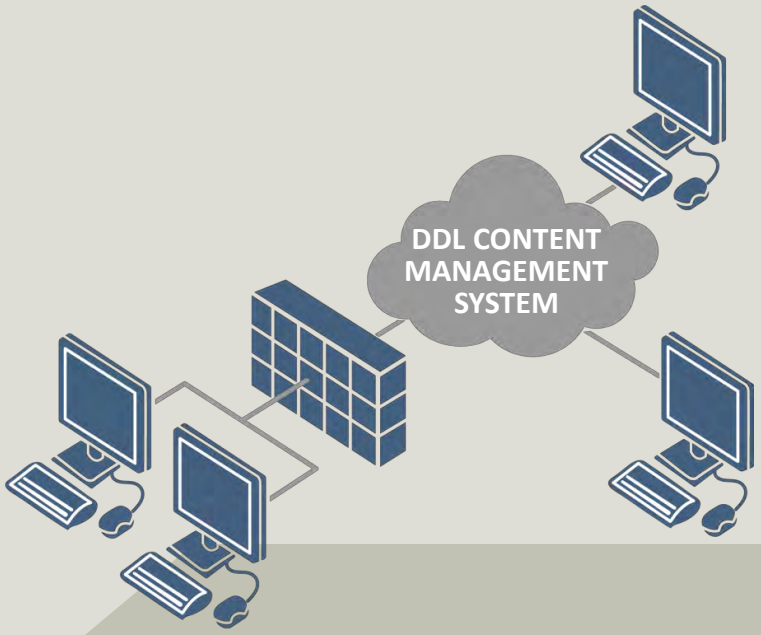
- Defines USAID's data governance structure
- Establishes the Development Data Library (DDL) as the Agency's repository of USAID-funded data
- Creates Data Stewards in every USAID operating unit
- Outlines requirements for USAID staff and implementing partners to submit data to the DDL, including a data tagging protocol
- Defines standard data clearance process
- Outlines special considerations for research data

***Crumbly, Pustejovsky. (2014, October 25). Announcing USAID's Open Data Policy**

Centralized Data Storage

A centralized repository for machine-readable data is key to USAID's efforts to publish international development data as a global good

The **Development Data Library (DDL)** is USAID's public repository of Agency-funded, machine readable data. USAID operating units and partners are required to submit international development data to the DDL at www.usaid.gov/data.



USAID requires implementing partners to submit datasets generated with USAID funding to the Development Data Library (DDL) in machine-readable, non-proprietary formats.

The DDL is a web-based solution where USAID staff and partners can upload datasets for public release, after which they are vetted and redacted for privacy, security, and other exceptions to release permitted by law.

The DDL contains data on programs, performance, evaluations, research, finances, and other subjects.

Governing USAID's Open Data Efforts

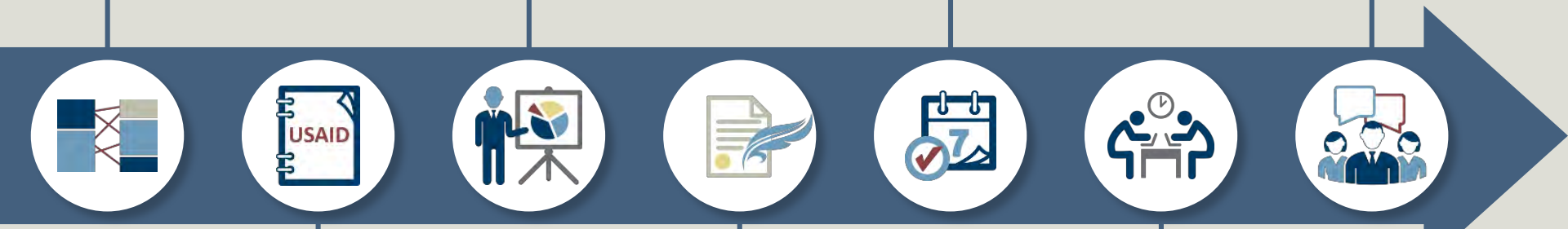
USAID has established formalized organizational authorities and strategic alignments throughout the agency

Organizational Alignment:
Strategic alignments between IT, Business Units, and Data Strategy
www.usaid.gov/digital strategy

Roles and Responsibilities:
Specific points of contact at USAID for managing information and data.

Inventory Schedule:
A schedule of how USAID plans to expand, enrich, and open its data inventory.
www.usaid.gov/digitalstrategy

Customer Feedback Process:
A process for stakeholders to provide feedback on USAID's public data assets.



Policy and Award Language:
Outline open data requirements for all USAID operating units and changes to award language requiring implementing partners to submit data to USAID.

Data Publication Process:
A process for releasing data, while ensuring protections for privacy and security and other considerations allowed by law.

Public Engagement:
Hackathons and other events invite participants from the private sector, public sector, non-profits, academia, and other members of civil society to generate new development insights using USAID data.

Lessons Learned

Partnership and public engagement are essential to creating a thriving culture of open data at the agency level and beyond.

Ongoing ***communication and change management*** must continue to accompany changes to policy and awards, well after initial implementation.

In the international context, prepare to address complex issues of ***data ownership*** and usage rights.

Special federal requirements apply to scientific and human subjects ***research data*** that agencies must thoroughly address in their open data efforts.

Public events (e.g. hackathons) can generate new insights to inform future projects, while creating a community of practice around agency data.

The learning curve is steep. Agencies should prepare to ***build the capacity*** of their staff and partners to open data responsibly.

Success Stories

Open Data Latin America and the Caribbean Hackathon (#LACHack)

In a first-of-its kind hackathon, USAID organized over 50 organizations in 2015 to tackle development challenges in Latin America. As a result, the event produced nine projects that generated new insight about crime and insecurity in the region.

http://www.usaid.gov/open/engagement

Open Geographic Data for Disaster Risk Reduction in Nepal

USAID and the World Bank organized a "crowdsourcing" event in which volunteers mapped Kathmandu's infrastructure. When a massive earthquake struck the country in April 2015, USAID was able to upload timely and current data onto GPS devices for disaster response teams.

http://pdf.usaid.gov/pdf_docs/pnaeb748.pdf

M-Farm

M-Farm and FEWSNet

In Kenya, M-Farm used open data from USAID's Famine Early Warning Systems Network (FEWSNet) to provide data on crop prices, trends, and fluctuations. This enabled farmers to plant crop varieties yielding greater income.

http://blog.usaid.gov/2013/05/why-open-data-matters-g-8-and-african-nations-increase-open-data-for-food-security/http://blog.usaid.gov/2013/05/why-open-data-matters-g-8-and-african-nations-increase-open-data-for-food-security/

Using Data to Improve Regional Water Management

USAID is working to use data in the Middle East and North Africa region as an effective tool for regional water management. Open and accurate data is facilitating more effective decision-making on the sharing and use of this scarce resource.

http://blog.usaid.gov/2013/03/usaid-in-the-middle-east-using-data-to-improve-regional-water-management/

Supporting Open Data Principles

USAID embeds generally accepted open data principles into its socialization and training efforts on its open data policy

USAID's Open Data Policy provides a "*framework for systematically collecting Agency-funded data in a central repository, structuring the data to ensure usability and making the data public, while ensuring rigorous protections for privacy and security.*"

ACCESSIBLE
Convenient, non-proprietary, machine-readable formats (e.g. CSV, JSON, XML)

DESCRIBED
Fully documented; limitations and processing instructions explained

REUSABLE
No restrictions on use

COMPLETE
Highest level of granularity practicable (e.g. latitude / longitude, individual survey responses)

TIMELY
Made available when data is of greatest use and updated regularly

MANAGED POST RELEASE
Point of contact assigned to continue updates and respond to queries

Online Resources

RESOURCES	URL
USAID Open Data Policy Announcement (Automated Directives System 579)	http://blog.usaid.gov/2014/10/announcing-usaids-open-data-policy/
USAID Open Data Policy	http://www.usaid.gov/sites/default/files/documents/1868/579.pdf
USAID Open Data Policy: Frequently Asked Questions	http://www.usaid.gov/data/frequently-asked-questions
Development Data Library	http://www.usaid.gov/data
USAID Open Data Events	http://www.usaid.gov/open/engagement
USAID Open Data Team	opendata@usaid.gov
USAID Public Feedback Channel (StackExchange)	https://opendata.stackexchange.com/questions/ask?tags=USAIDopen

FEDERAL CIO COUNCIL

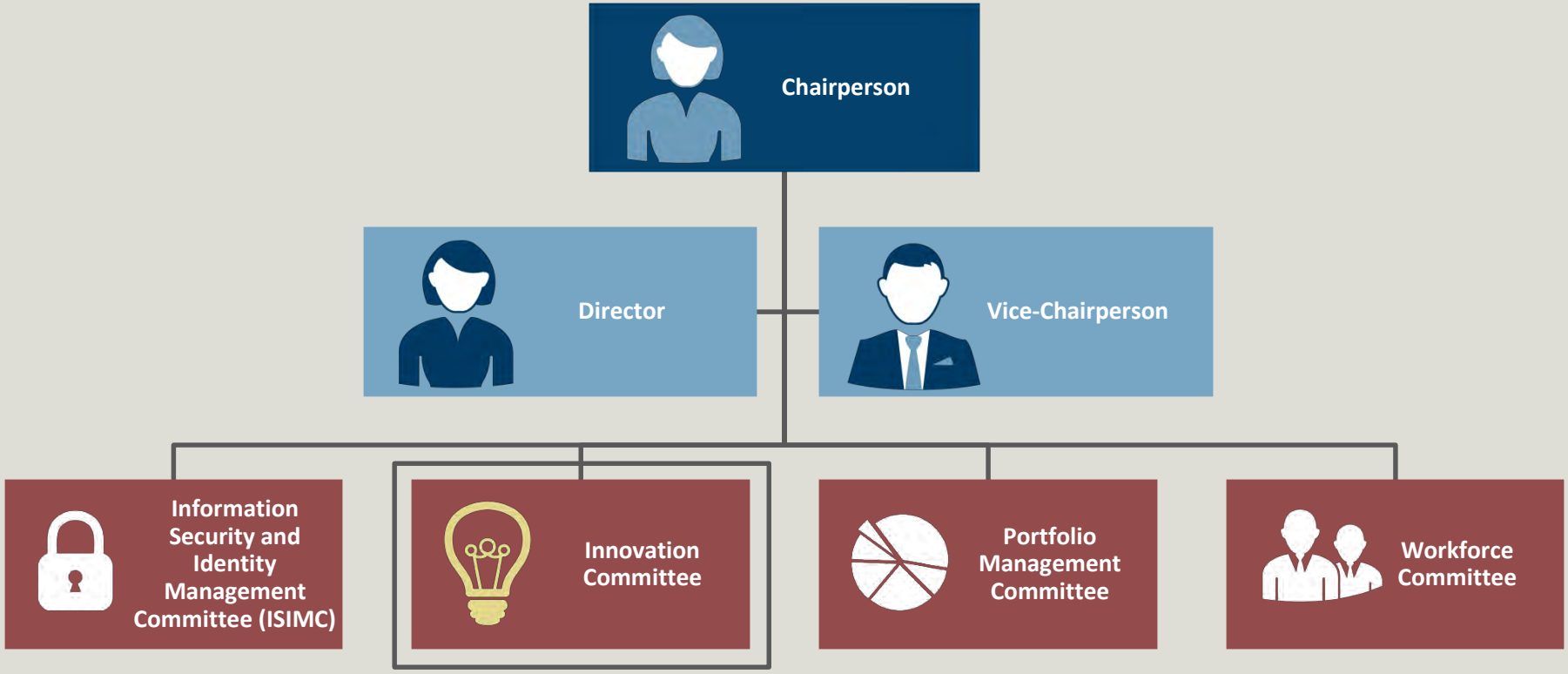
For more information contact the Innovation Committee at

feedback@cio.gov

The Federal CIO Council

The Federal CIO Council is the principal interagency forum on Federal agency practices for IT management

The **Federal CIO Council** *mission is to improve practices related to the design, acquisition, development, modernization, use, sharing, and performance of Federal Government information resources.*



The Innovation Committee

The Federal CIO Council created the Innovation Committee to enable Agency mission delivery, improve customer service, maximize return-on-investment, and support emerging IT needs

Chaired by **Margie Graves** (DHS Deputy CIO) and **Bill Zielinski** (SSA CIO), the **Innovation Committee** focuses on relevant topics such as the use of modern technologies to deliver digital services to citizens and businesses, deployment of mobile technology within Government, modular IT development strategies, and using Federal data as a strategic resource to enable Agency mission delivery and to grow the economy.

For more information on the Federal CIO Council, the Innovation Committee, or products and resources, visit **https://www.CIO.gov.**