FY 2019
ANNUAL REPORT
Information, Communications, and Technologies (ICT) for Development Workgroup
<table>
<thead>
<tr>
<th></th>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Introduction</td>
</tr>
<tr>
<td>3</td>
<td>Letter from SID-Washington</td>
</tr>
<tr>
<td>4</td>
<td>FY 2019 Workgroup Co-Chairs</td>
</tr>
<tr>
<td>5</td>
<td>Events Calendar</td>
</tr>
<tr>
<td>6</td>
<td>Event Summaries</td>
</tr>
<tr>
<td>12</td>
<td>Contact Us</td>
</tr>
</tbody>
</table>
The SID-Washington (SID-W) Information, Communications, & Technologies (ICT) for Development Workgroup is a group of individuals actively engaged in what is new and exciting in development. With events ranging from the best data for policy impact to mobile innovations, this workgroup aims to inform and educate on any and all development issues that relate to conveying and presenting information.
Dear Members of the Information, Communications, & Technologies (ICT) for Development Workgroup,

We are happy to report that we had another exciting year! As we reflect on last year, the workgroup produced several great events, ranging from Machine Learning in Global Health to Digital Solutions – Integrating Gender from Design through Delivery to Navigating the Revised ADS 579. We are currently working on events for FY2020, so stayed tuned for more information!

In addition to focusing on issues pertaining to conveying and presenting information, the ICT for Development Workgroup focuses on new and exciting technologies affecting projects in the development sector.

Thank you for your continued interest and support of the workgroups. We hope to see you at future SID-Washington events! If you have any questions, please feel free to send an email to events@sidw.org.

Best regards,

Katherine Raphaelson

Paul A. Sherman
Elizabeth Corley is the Director of Communications for the International Health Division at Abt Associates. Prior to joining Abt, she was the Director of Communications for Development Gateway from 2006 to 2010, and Communications Manager for Futures Group from 2004 to 2006. Elizabeth has a BA in International Relations from Boston University and a MA in International Policy Studies from the Monterey Institute of International Studies.

Elizabeth Corley
Director of Communications,
International Health Division
Abt Associates

Chris Light is a seasoned C-level Executive, Technologist, Program Manager, and Entrepreneur with 25 years experience featuring an emphasis on ICT for Development. He has a global reach and global result set. He handles a multi-agency Federal portfolio, specializing in the 3Ds (Defense, Development, and Diplomacy) and Foreign Affairs. He has undertaken ICT activities worldwide, in support of all USAID Bureaus, in a variety of thematic areas, including multi-donor. His work has been previously recognized by the White House Communications Agency, the Department of State, and the USAID Administrator.

Chris Light has a MSc Degree from Boston University and has a double Major/double Degree from the University of Maryland.

Chris Light
President and Chief Technology Officer,
Ogimaa Inc. (NIIGANII OGIMAIIWIN Inc.)
EVENTS CALENDAR

**Thursday, August 15th, 2018**
6:00PM - 7:30PM | SID-Washington
Navigating the ICT4Dev Field

**Wednesday, September 19th, 2018**
4:00pm-5:30pm | SID-Washington
Machine Learning in Global Health

**Wednesday, March 6, 2019**
4:00PM - 5:30PM | SID-Washington
Digital Solutions - Integrating Gender from Design through Delivery

**Thursday, April 4th, 2019**
4:00PM - 5:30PM | SID-Washington
Navigating the Revised ADS 579
Navigating the ICT4Dev Field

Speakers: **Krista Baptista**, Senior Director, Center for Digital Acceleration (CDA), DAI  
**Ethel Méndez Castillo**, America Hub Manager, Akvo  
**Kyle Duarte**, Director, Digital Solutions, and Advisory Services, FHI360

**Summary:** Information and communication technologies (ICT) are changing the face of development and driving impact like never before. The possibilities for innovation seem limitless. Companies are increasingly looking for the next innovator or ICT expert. Could that be you? On August 15th, SID-W’s ICT for Development Workgroup and the Young Professionals in Development Network (YPN) learned about the field of ICT4Dev, how to develop expertise in the field (without being a techie), and the tools needed to obtain a job in this fast-evolving sector. Three experts—an entrepreneur, a recruiter, and an ICT specialist—led us through an engaging and participatory discussion, which left them with practical tools and an increased understanding of ICT4Dev.

This was a joint event with the Young Professionals in Development Network.

**Key Takeaways**

1) To develop a career in ICT4Dev, you need to understand the actors and issues in the space and possess various skills that organizations want.

   To understand the actors and issues in the ICT4Dev space, the speakers underscored the importance of networking and reading up on issues. **Krista Baptista (DAI)** mentioned that many events take place in DC where individuals can network with people in the ICT4Dev field, such as monthly happy hours. At these events, job seekers can learn the types of skills for which companies are looking and then highlight those skills in their resumes when applying for jobs. **Kyle Duarte (FHI 360)** stressed researching the activities of different ICT4Dev actors and current issues to prepare for interviews. **Ethel Méndez Castillo (Akvo)** and Mr. Duarte also emphasized the necessity of having at least two different skillsets, including communication skills, proposal writing, and language skills. Each speaker also highlighted how invaluable field work can be.

2) The ICT4Dev field needs people to build the bridge between project teams and technologists

   As technology continues to advance, more skilled engineers and technologists are needed to develop and operate ICT equipment. However, program implementers are often unfamiliar with the terminology and operations of the ICT field, so bridge-builders between technologists and project teams are necessary according to Ms. Baptista. Because using ICT in development is about working more efficiently, these bridge-builders must understand both the programming and technical sides of ICT4Dev projects to better manage said projects and communicate effectively.

3) ICT is a tool for development actors to solve a problem

   In the field, the use of ICT allows development actors to work more effectively and efficiently. Ms. Baptista made clear that the goal is not necessarily to increase the application of ICT in development projects, but to improve the sector’s operations. According to Mr. Duarte, every use of ICT in development must be connected to a mission or goal. For example, Akvo used data and mapping technology to improve the water, sanitation, and hygiene (WASH) sector in nine west African countries according to Ms. Méndez Castillo. The data collection and the mapping of these water points have enabled governments to reveal the non-functional ones and to find patterns in the problems that they encounter.

4) While adding more ICT to development projects may bring many benefits, actors must realize that technology can also do harm

   Using ICT in development projects may have unintended consequences. For example, Ms. Méndez Castillo mentioned that the privacy and security of data varies among countries, so collecting data could make people more vulnerable to malicious actors. Furthermore, Mr. Duarte commented that the collection of data could alienate host government actors if it reveals corruption or the misuse of funds, which could lead to increased online censorship.
**EVENT SUMMARIES**

**Machine Learning in Global Health**

**Moderator:** Pamela Riley, Senior Digital Health Advisor, Abt Associates

**Speakers:**
- Leslie Heyer, Founder, Cycle Technologies
- Gabriel Krieshok, Information and Communication Technologies for Development (ICT4D) Specialist, Abt Associates
- Ambika Samarthya-Howard, Head of Communications, Praekelt Foundation

**Summary:**

The explosion of data available from social media and digital platforms presents big challenges and big opportunities. This session featured three speakers who discussed how machine learning can mine public health data to improve health outcomes.

The event included:
- A demo on scraping social media to track health topics from Abt Associates
- An analysis of how WhatsApp data can shape health messaging from Praekelt Foundation
- Insight on how Cycle Technologies created a fertility tracker app to help avoid unplanned pregnancy

This was a joint event with the Health and Nutrition Workgroup.

**Key Takeaways**

1) **Ask the right questions: Let the problem drive the technology, not the reverse**

All the panelists agreed that one’s mindset while using ICT for development must recognize technology as a method of addressing a specific, well-identified problem. Practitioners, according to Ambika Samarthya-Howard (Praekelt Foundation), “need to think about how the technology can suit the problem, not how the problem can be suited to the technology.” Accordingly, there is a need to re-iterate the role of technology as a means to an end and always assess it in context of that end. Machine learning can provide new and innovative solutions to longstanding problems, but not always. When deciding whether machine learning is best solution to a problem, one should consider the following issues: cost-effectiveness, risk, available data, assumptions, and impact. Samarthya-Howard noted that at the end of the day, we are trying to improve lives, not technology, so we must adopt technology that has the best results for our programs. Machine learning can be one of many new and exciting avenues of doing so.

2) **Behind the scenes of designing machine learning technology**

Compared to other types of technology, machine learning is unique in its ability to gather a variety of data to determine an algorithm that otherwise cannot be produced manually. Even data scientists do not know exactly how the system determines the relationship between the input and output variables. When trying to solve a problem, data scientists make many assumptions about different aspects of the problem, most notably evident in the type of data they choose to input. Gabriel Krieshok (Abt Associates) suggested that practitioners take on an exploratory role, constantly assessing where one might be wrong and what data can do to improve results. Since machine learning is based on many assumptions, constantly assessing the robustness of said assumptions is crucial for the delivery of efficient outcomes.

3) **Look at the ecosystem of data collection & analyze relationships between & among datasets**

The real value of machine learning comes in with how the data is collected, organized and categorized from traditional sources, such as government agencies and unconventional sources, such as social media. More important than just collecting the relevant data is getting creative about what these input data could include, particularly when combining multiple datasets can provide the necessary information. Mr. Krieshok noted the benefit of pooling different datasets together and making use of readily available data.

4) **Challenge in machine learning: Bias**

Ms. Samarthya-Howard stated, “Machine learning is not a wizard, it is just as smart as the questions we ask and what we train it be...it is not a substitute for smart, inclusive, diverse behavior.” Mr. Krieshok also expressed his concerns about bias in machine learning, which unlike bias in traditional technology cannot be retraced via reverse engineering. On a cautionary note, Krieshok noted that many datasets can contain inherent biases due to real-world discrimination. He highlighted the importance of using rigorous, diverse datasets, since often times, the problem lies not with the code, but with the dataset and the underlying bias within. Additionally, Mr. Krieshok emphasized the importance of including diverse perspectives when designing machine learning technology. He suggested that development and policy professionals should certainly partake in the processes, since they are trained to think differently from data scientists. Mr. Krieshok also spoke about how machine learning is becoming more and more accessible; open sourcing allows people to improve and create new, even superior, platforms. Leslie Heyer (Cycle Technologies) added that as long as one is acutely aware of the problem of bias and is mindfully looking into it, one can find solutions.
Digital Solutions – Integrating Gender from Design through Delivery

Moderator: Sarah Romorini, Senior Associate, Abt Associates

Speakers: Yolandi Janse van Rensburg, Head of Content & Communities, Every1Mobile
Galina Nurko, Digital Associate, Center for Digital Acceleration, DAI
Blerta Picari, Project Director, Chemonics

Increasing numbers of development projects are choosing digital and mobile technologies to reach beneficiaries, particularly women and girls. This session explored the crossroads of digital solutions and gender integration from design through delivery. It featured:

- Effective methods of assessing the digital landscape from a gender lens to optimize program strategy and design
- Best practices for designing effective and human-centered digital solutions for women and girls
- The opportunities and challenges faced during project delivery

Effective tools for conducting comprehensive digital ecosystem assessments were discussed from DAI’s Center for Digital Acceleration. Every1Mobile covered the process of optimizing human-centered design principles and approaches to ensure technology adoption and inclusion during the early stages of any program design process. A case study of the USAID Moldova Competitiveness Program highlighted the importance of including women in the design phase and the value realized from empowering them to design their own digital tools.

This was a joint event with the Gender & Inclusive Development Workgroup.

Key Takeaways

1) Analyze projects through the digital ecosystem layers to address different needs
The digital ecosystem is an effective tool to understand a greater array of acting components and socioeconomic barriers to digital tools. As Galia Nurko (DAI) explained, by analyzing projects and issues on various social scales at the individual, community, and national levels, one can have a holistic understanding of a project’s impact. However, the digital ecosystem is only valuable if teams look to their partners on the ground, such as regional women’s rights organizations, who understand the local context. This can help more effectively bridge the gender gap by leveraging their institutional and national knowledge and thus address the issues of a target population.

2) Put communities at the forefront of project design and implementation
Yolandi Janse van Rensburg (Every1Mobile) stressed the need to have empathy for communities when developing projects. It is paramount for gaining insights, addressing the unknown, and ultimately relying on listening to the users, as they are the experts of the challenges in their lives. This can begin by surveying community members rather than geography and demographics. Janse van Rensburg also reminded attendees that implementers should retest tools through communication and negotiation to increase effectiveness and empower users.

3) Redefine Gender Systematically
Blerta Picari (Chemonics) urged organizations to integrate their projects into other institutions. Her assignment regarding Moldovan educational robotics – which initially started as a side project – was to be formalized into the official curriculum. This helps enforce equal access among students to digital tools. It also increases opportunities for finance as the project is professionalized and becomes more permanent.

4) Community role models are key to honest dialogue and restructuring cultural norms
The power of role models can be a major factor in shifting gendered perceptions in technology. Organizations need to mitigate social barriers to help girls and women feel comfortable expressing themselves. In Janse van Rensburg’s case, she relied on artistic mediums like Play-doh to allow girls to construct their role models. Every1Mobile thus created Rosy as the face of their project to emulate role models and act as an older sister to whom girls could relate and trust. Picari also emphasized incorporating institutional role models, like teachers, to be more effective at restructuring gender cultural norms for children particularly in rural areas, as families may express engrained norms.
5) The reality of the Digital Divide
Despite the progress that has been made, Sarah Romorini (Abt Associates) reminded attendees that the digital divide remains a profound issue. 1.7 billion people still do not own a mobile phone, and women are 14 percent less likely to have one. Lack of access to the Internet is even greater for women (approximately 30 to 40 percent less than men). Women are still often left behind for various technological reasons such as security, technological literacy, confidence, and cost above all. This issue cannot be ignored any longer and diversifying the digital landscape can provide women worldwide a voice and unprecedented access to knowledge.
EVENT SUMMARIES

Navigating the Revised ADS 579

Moderator:  **Ben Mann**, Global Practice Lead, Development Results, DAI

Speakers:  **Siobhan Green**, Co-Owner, CEO, Lead Technology & Data Strategist, Sonjara  
**Carmen Tedesco**, Technology Manager and GIS Specialist, Development Results, DAI  
**Chip Temm**, Chief Technology Officer, MSI, a Tetra Tech Company

The recent addition of mandatory geographic reporting requirements to the ADS 579 and the USAID open data panel discussion at MERL Tech 2018 has prompted the convening of a group to brainstorm and provide ideas to USAID to facilitate continued compliance. We discussed this issue with companies and organizations affected by these new policies to start a dialog around recommendations we could suggest to USAID. Some ideas for discussion included:

- Clear guidance on Development Data Library (DDL) requirements and training to COR/AORs who are writing and reviewing RFPs.
- Cost Recovery for the increased data collection, storage, and reporting requirements.

We know that every COR/AOR & Mission is different. Their knowledge of IT and data is different. We need more rails on the road as they roll out these new requirements so we can do what is necessary to be compliant and collaborative without being hamstrung by tight or limited budgets.

This was a joint event with the Monitoring and Evaluation Workgroup.

**Key Takeaways**

1) **ADS 579 Revision: Balancing the Privacy Security, Open Data Resources, and Geospatial Tagging**

**Ben Mann (DAI)** opened the discussion by introducing the Open Data Initiative and evolution of ADS 579 as part of USAID guidance to collect, analyze, and work on data of an assigned project in the field. He explained the guidance update in July 2018 has changed how USAID’s counterparts should submit the (1) data disaggregation and geolocation in assessing the risk and management planning, especially for activity based projects such as, seminars, workshops, or similar interventions on behalf of USAID as implementing partners, and (2) geospatial data submission standard. **Siobhan Green (Sonjara)** added that organizations could anticipate the release of USAID consideration on balancing the privacy security, open data resource, and geospatial tag on the USAID Learning Lab platform.

2) **The Future of an Ideal Dataset: Tackling the Sectoral Issue in Collective**

**Chip Temm (MSI)** mentioned how important it is for a research and evaluation process to get their data from various datasets such as, international organizations, open data resources, and local governments. Temm often found that the challenge of a geospatial problem in the field arises from a facilitation level. The sectoral policy in a local government challenges the organizations’ opportunity to get access to certain kind of data. In addition, **Carmen Tedesco (DAI)** hoped that a mechanism could address this situation through an accessibility standard mechanism, so that the project extension would not need to reinvest to the current available data. In addition, Temm mentioned that an additional challenge in planning, collecting, and managing data to align with the revised ADS 579 is the framework of the data management. As each data set brings different levels of contribution to both the design and evaluation process, it is ineffective to invest equally to all datasets.

Furthermore, Tedesco mentioned that the biggest challenge in managing the dataset was producing an optimal result under three crucial conditions: (a) limited access and budget, (b) data availability on Open Resources, and (c) commitment to deliver the USAID data’s quality standard outcome. Green also advised how organizations should foster partnerships with local governments and institutions, but not to rely on them to manage data as both the organizations and local stakeholders have not developed the infrastructure to fulfill the ADS 579 guidance in providing standardized data resources.
3) Raising the Awareness of Data Literacy Training
Mann talked about the importance of data literacy, in order to deepen the exposure of data security and visibility. Green emphasized the urgency of both understanding data literacy and security privacy, as cyber security is a way to avoid non-democratic governments misuse of open data resources. Moreover, Tedesco explained how data literacy training should include both the knowledge of synthesizing the reviewed dataset in a geospatial data center, and how to flag the sensitive data ethically. Temm added how management of disposable data should also be incorporated as one of key subjects in data literacy learning.

4) Open Resources: Using a Dataset with Guidance and Responsibility
Green highlighted that USAID should work together with organizations in building commitment and responsibility in both the privacy security and data transparency topic. While open data sharing has mutually benefitted USAID supported organizations, Green mentioned that it requires a compact data management plan. A standardized plan would help an organization in optimizing budget allocations to produce a certain quality of datasets.

Temm added how organizations should be able to deliver the data on the Open Resources platform publicly, in order to show people through the collection of data the contribution of development projects and tangible social changes in various USAID programs worldwide. Tedesco ended the presentation by recommending a budget and infrastructure relocation for the DDL (Development Data Library) to support this development.
For more information, contact us at events@sidw.org.

SID-Washington Staff

Katherine Raphaelson - President
kraphaelson@sidw.org

Paul A. Sherman - Senior Programs Manager
psherman@sidw.org

FY 2019 Workgroup Co-Chairs

Elizabeth Corley - Abt Associates
Elizabeth_Corley@abtassoc.com

Christopher Light - Ogimaa Inc. (NIIGAANII OGIMAAWIWIN Inc.)
chris.light@ogimaa.com

Acknowledgement

We would like to thank Program Associates Maame Esi Eghan, and Lauren Faloni for their hard work to create this report.