



MERL Tech DC

September 7-8, 2017

WASHINGTON
— DC —

ACADEMY HALL • FHI 360

SUPPORTED BY:



Conference Information

Wireless Networking

Network Name: FHI360Guest

Password: WelcomeToFHI360

Twitter Hashtag

The event hashtag is #MERLTech and our Twitter is @merltech.

Support and Organization

The conference is supported by The Rockefeller Foundation, DevResults, Social Impact, TechChange, the Digital Impact Alliance (DIAL), and FHI 360.

Our steering committee included Danielle de Garcia, Nick Martin, Veronical Olazabal, Josh Mandell, Melissa Johns, Katherine Lew, and you.

This year's conference was organized by Linda Raftree and Wayan Vota with the support of Daniel Ramirez-Raftree. Thanks for all your support and participation!

Private Meeting Space

The upstairs balcony area will be available for small meetings or a quiet working location on an ad hoc basis. Please be courteous to your fellow conference attendees and keep noise to a minimum.

Punctuality

Every effort will be made to make sure MERL Tech runs on time. Please support our efforts by reviewing this agenda, planning out your day, and moving quickly between sessions. Thank you.

Participating Organizations

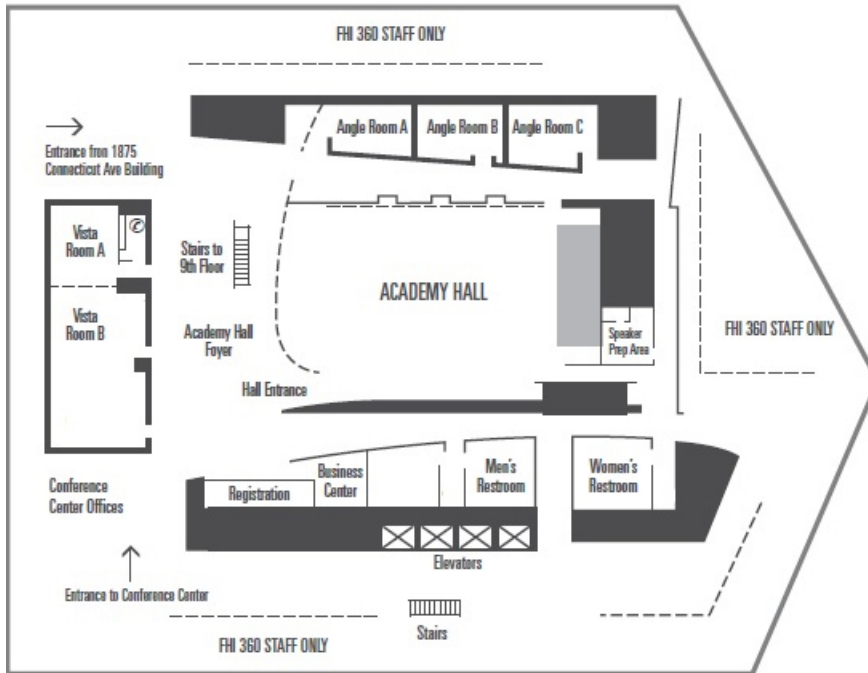
Some 340 people representing 180 organizations as listed below, are participating in MERL Tech.

Abt Associates	Department of State
Action Against Hunger	Development Gateway
Advantum Health	Development Monitors
AECOM International Development	DevResults
Africare	DevTech Systems
Aga Khan Foundation	Dexis Consulting Group
Akros	Digital Impact Alliance (DIAL)
American Evaluation Association	Dobility, Inc.
American Jewish Joint Distribution Committee	Doctors without Borders
Amplifier Strategies	Education Development Center
Apprio Inc.	Elizabeth Glaser Pediatric AIDS Foundation
Aspen Network of Development Entrepreneurs (ANDE)	EngenderHealth
AVAC	Equal Access
Bamba	Esri
BanQu	Excella Consulting
BAO Systems	Federal Bureau of Investigation
Benita Williams Evaluation Consultants	Feedback Labs
Bill & Melinda Gates Foundation.org	FHI 360
Bixal	FINCA
Blumont / International Relief and Development (IRD)	Food for the Hungry
ByteCubed	Ford Foundation
Caktus Consulting Group, LLC	Forest Hills Group
CARE	Forum One
Catholic Relief Services	Freedom House
Center for Global Health Engagement (CGHE)	GEF IEO
Center for International Private Enterprise (CIPE)	GeoPoll
CGAP	Girl Effect
CIEL	Global Innovation Fund
CIVICUS	Global Integrity
Clear Horizon	Global Language Network
Comic Relief	GlobalGiving
Consultant	GoodWeave International
Counterpart International	Greenmash
Creative Associates International	HelpAge
Cultural Orientation Resource Exchange	IBTCI
D-tree International	Impact Atlas
DAI	Impaq International
Data Innovator	INASP
Data Rotundi	Innovations for Poverty Action (IPA)
DataKind (DK DC)	InSTEDD
Delta Analytics	Institute for Development Impact
	InterAction
	InterMedia

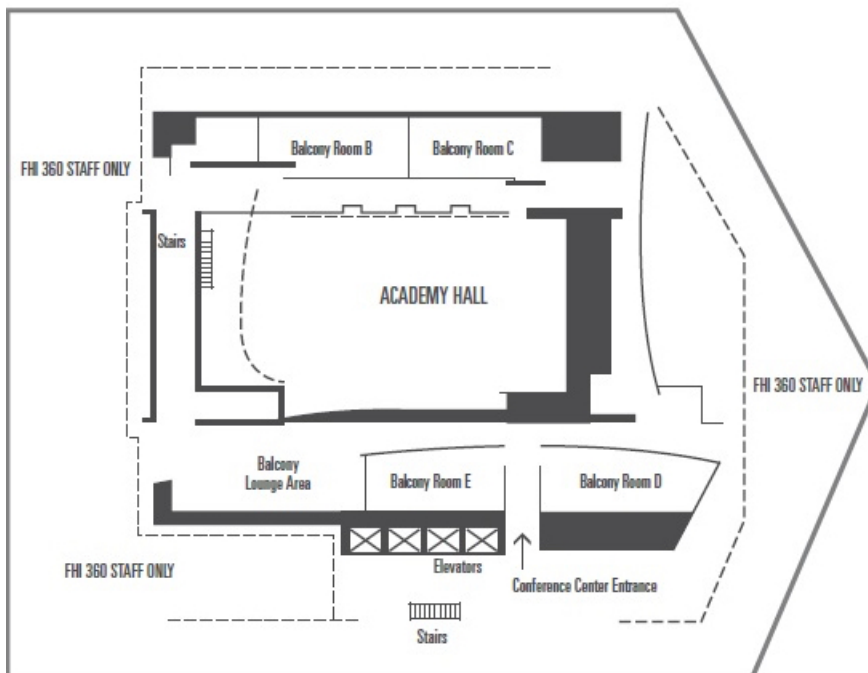
International Center For Journalists	Project Concern International (PCI)
ICRW	Praekelt.org
International Justice Mission	PricewaterhouseCoopers (PwC)
Internews	Project Balance
IntraHealth	Project HOPE
IntraHealth International	PYXERA Global
IREX	Relief International
International Solutions Group (The ISG)	Root Capital
John Snow, Inc. (JSI)	RTI
Johns Hopkins Center for Communication Programs	Salesforce.org
Justice Rapid Response	Save the Children
Kantar Public	Sightsavers
Keshif	SIMLab
Keystone Accountability	Small Media Foundation
Kurante	Social Impact
Liberia Medicine & Health Product Regulatory	Solar Sister
Authorigy, Government of Liberia	Sonjara, Inc.
LogAlto M&E software	Souktel Digital Solutions
LogicalOutcomes	Strategic Good
Lore.ai	Synergy International Systems
Lucid Collaborative	Taoti Creative
Making Cents International	TechChange
Management Systems Intl / Tetra Tech	Technology Salon DC
Maternal and Child Survival Program	TechnoServe
MEASURE Evaluation-ICF	Tetra
Medic Mobile	The Bill & Melinda Gates Foundation
Mercy Corps	The Engine Room
Ministry of Foreign Affairs, Liberia	The Mitchell Group
Ministry of Health, Liberia	The Rockefeller Foundation
Mission Critical Development	Transparency and Accountability Initiative
Mobenzi Technologies	UNANCA
Moonshot Global LLC	University of Minnesota
More Than Me	University of Pennsylvania Graduate School of
Management Systems International (MSI)	Education
National Democratic Institute	University Research Co., LLC
National Science Foundation	Uptake
Nile Point Consulting LLC	US Pharmacopeia
NORC at the University of Chicago	USAID
Open Gov Hub (an initiative of Global Integrity)	Vera Solutions
Open Society Foundations	Vision Group Liberia Limited
Openwise	Vital Voices
Outreach International	Voltaic Systems
Oxfam America	World Bank
Oxfam GB	World Education, Inc.
Oxford Policy Management	World Learning
Pact	World Resources Institute
Palladium	World Vision
Partners for Development	

Room Locations

8th Floor



9th Floor



AGENDA

Thursday, September 7th

#MERLTech is the event hashtag.

Click on bold session titles for session details, speaker bios and additional materials.

Day 1: Thursday, September 7, 2017

8:30-9.00 Registration

- **Coffee and Registration**
Wake up, grab coffee and find your friends and your seat before the event begins.

9.00-9.30 Welcome and Opening Talk

- **Navigating the changing data landscape - the South African experience.** *Jerusha Govender, Data Innovator and South African M&E Association*
The digital revolution has set in motion the 'big bang' of data produced by human digital interactions and growing platforms of data generation. But, navigating this changing data landscape requires development professionals to be more aware of its potential, its sources, and uses. Even more so it requires that we scale practical application in development sectors, shift the status quo in data use, and build the future data leaders. In this key note Jerusha will present the changing data landscape of South Africa. She will also elucidate South Africa's successes and challenges, which can be mirrored across many developing countries. *Level: beginner, intermediate. (Academy Hall)*

9.30-10.15 Opening Session

- **Developing a MERL Tech Maturity Model.** *Maliha Khan, Independent*
What would a MERL Tech Maturity Model look like? Can we create a visual model that would enable us to evaluate ourselves according to our capacity to make responsible and informed choices about how, when, where and why to use technology and digital data approaches for MERL? At this interactive session we'll discuss and begin defining some parameters for the wider field of digital data and technology-enabled MERL approaches. *Level: beginner, intermediate, advanced. (Academy Hall)*

10.15-10.45 Coffee/Tea Break - Gallery Walk

- Grab coffee/tea and a new/old friend for a gallery walk to contemplate the different "MERL Tech Maturity Models." Do some live feedback and commenting on them, and vote for your favorite. Be sure to snap a photo of the model that you like best and save it for this afternoon's activity!

10.45-12.15 Morning sessions (choose one)

- **So many methods, so little time!** *Kecia Bertermann, Girl Effect; Melissa Chiappetta, Abt Associates*
This session is for anyone who is looking to study changes in perception or behavior online or through a digital platform but isn't sure where to begin. Drawing on case studies from an Abt Associates evaluation of activities under the USAID Family Care First Cambodia project, and Girl Effect research and evaluation for the global Girl Effect Mobile platform, participants will learn about the digital measurement and evaluation approaches that were developed for a targeted intervention and a broad platform. *Level: beginner, intermediate. (Academy Hall)*
- **Tools, tips and templates for making responsible data a reality.** *David Leege, Catholic Relief Services (CRS); Linda Raftree, Independent Consultant; Marcy Brown, Sonjara; Emily Tomkys Valteri, Oxfam Great Britain*
At this session we will share concrete and actionable strategies, tips and resources for improving how we handle the data of people involved in our MERL and our wider programming. Participants will walk away with knowledge, resources and examples of data policies, tools, templates and contacts that will help them immediately implement more responsible data practice at their organizations. *Level: beginner, intermediate. (Balcony B)*
- **What do data-driven approaches look like in practice?** *Nathan Barthel, Catholic Relief Services (CRS)*
During this facilitated workshop, participants will explore the concept of 'being data driven'. Using the participants own experiences, we will identify some common challenges to successfully using data to drive decision-making and begin to develop some potential solutions. Participants will walk away with tangible strategies for overcoming their barriers to 'being data driven. *Level: beginner, intermediate. (Balcony C)*
- **Technology in citizen generated data: Trading efficiency over inclusion?** *Kristin Bodiford and Jonna Bertfelt, HelpAge International; Sarah Hennessy, Feedback Labs; Marc Maxmeister, Keystone Accountability; Nada Zohdy, Open Gov Hub*
This interactive session will invite participants to help identify and co-develop solutions that support inclusion and participation in MERL activities. We will begin

by sharing several case studies highlighting challenges organizations have faced in balancing inclusion and participation with efficiency and use of technology/digital data collection. Then we will engage in a World Café process to explore the following questions: What are the implications on citizen voice for making a shift to digital data processes? How might this be either a barrier or an enabling factor for inclusion? How might we design workflow solutions that best enable citizen voice, and what role can technology play? What are the different considerations? What makes a data workflow inclusive? *Level: beginner, intermediate, advanced. (Balcony D)*

- **Participatory design of national level Information Management Systems: Zambia's Gender-based Violence Informational Management System.** *Yeva Avakyan and Holta Trandafili, World Vision US; Stacey Berlow, Project Balance; John S. Manda, World Vision Zambia*
Technological solutions are not commonly used at large scale to address sensitive issues such as gender-based violence (GBV) for fear of harming those in the system as well as because of the development and maintenance intricacies. However, when responsibly designed and used, technology is invaluable to survivors and stakeholders. This session presents the successful case of Zambia's National Gender Based Violence Informational Management System (GBVIMS). We'll discuss issues of ethics and technology, coordination of actors, current use, and sustainability. *Level: intermediate. (Balcony E)*

12.15-13.15 Lunch & Live Demos

- Pick up your lunch, reconnect with your friends and peers in MERL and technology, and check out the awesome vendor demonstrations.

13.15-13.45 Lightning Talks (in plenary)

- **You can't have AID without AI – The future of big data and application of Artificial Intelligence.** *Jacob Korenblum, Souktel Digital Solutions*

This lightning talk will provide attendees with a snapshot into the value of artificial intelligence (AI) and its application in the future of M&E. Drawing on our technical knowledge and lessons learned from launching ICT4D solutions across the globe, we will provide an overview of the technology, detail possible applications, and close with a few cautions for early developers.

- **Adaptive monitoring: How do we learn from our programs?** *Anahi Ayala Iacucci, Internews*

We all collect incredibly useful data that we often don't even use. What can this data do for our own programs? How can we use it to create and sustain a constructive relationship with our partners. How can we better connect the "M" to the "L" in MERL? And how can we do it in low tech geographies? Internews will share how we used M&E data for program adaptation over a 3-year project, and how that same data was also used to hold other agencies accountable.

- **When the control group wins....** *Marc Mitchell, Dtree International*

When comparing a test group to a control, typically we expect the test group to do better. What happens when it does not? What do we do when data tells us that the control group wins?" In this Talk we'll share our experiences with the "Safer Deliveries" digital health project in Zanzibar, where the control group won.

- **Following the yellow brick road down the rabbit hole.** *Emily Tomkys Valteri, Oxfam Great Britain*

Oxfam has been taking steps to integrate our program data into a standard database and push it through a reporting layer. Not only does this allow us to effectively protect our data but also allows for analysis beyond survey to survey. Dare we dream of national or even cross border reporting and analysis? We'll present the steps taken so far and challenges and successes that have arisen during the process. Courage, heart and brains have got us to the point of funding and organizational sign off but it still seems like a bit of a fantasy. Will the yellow brick road lead us down a rabbit hole or will we achieve a datahub that enables us to be data driven.

- **How instant is instant?** *Sergio Somerville, FHI360*

In our quest to shorten feedback loops for donors and implementers, we have promoted approaches that leave out our beneficiaries. How would our interventions change if the sources of our data could also be the first users of that data? In this lightning talk, FHI 360's Global Education team will showcase how we use truly instant offline and on-site reporting to bring beneficiaries back into the information loop.

13.45-14.45 Post-Lunch Sessions (choose one)

- **M&E Squared: Monitoring & evaluating MERL technologies.** *Alexandra Robinson, and Sutyajeet Soneja, USAID; Molly Chen, RTI International*
The momentous uptake of digital technology is changing MERL practices across the development enterprise. Mobile data collection platforms, satellite imagery, remote sensors, and other emerging technologies are increasingly used to monitor and evaluate development programs. Simultaneously, development programs are emerging in which implementing MERL technology is the primary intervention. But how do we conduct M&E when MERL Tech is the intervention? *Level: intermediate, advanced. (Academy Hall)*
- **One system to rule them all? – Balancing organization wide data standards and project data needs.** *Jason Rubin, Project Concern International (PCI); Mike Klein, International Solutions Group (ISG); Kate Mueller, DevResults*
Is your organization considering how to manage project results data from a diverse set of projects across your organization? Many organizations have tension between the need for enterprise data management solutions that can be used across the entire organization and solutions that meet the needs of specific projects. Headquarters IT and M&E departments naturally want to invest in systems that can solve problems at scale, standardize technologies and results across a range of projects, and save the organization precious resources. Meanwhile, projects want tools that are as tailored as possible to ensure an appropriate fit for the context on the ground. Ultimately, every organization has to strike a balance between these options — but how? In this session, Project Concern International (PCI), International Solutions Group (ISG), and DevResults will share their experiences and solicit feedback from the group to collate a set of shareable best practices, which will be distributed afterwards. *Level: beginner, intermediate, advanced. (Vista)*
- **It's not the tool's fault! How change management for MERL Tech can make or break your implementation.** *Alison Blajda, Vera Solutions; Laura Fenwick and Keith Fleming, Pact Inc.; Hannah Dunphy, Justice Rapid Response*
Too many MERL tech implementations suffer because the last-mile efforts that lead to user adoption — training, user acceptance testing, and incorporating feedback — aren't part of the project plan. With staff already working at capacity, a lack of structured change management can lead to frustration with a new data system. In this session, we will explore how best to manage technological change, common pitfalls to avoid, and successes we can all replicate. *Level: beginner, intermediate. (Balcony B)*
- **Visualizing what connects us: Social network analysis 101.** *Anne Laesecke, IREX; Danielle de García, Social Impact*
Visualizing networks can reveal critical insights for understanding relationships

between organizations, social movements, and/or individuals; supply chains; and even information flows and knowledge transfer. This session will introduce attendees to Social Network Analysis (SNA) as a tool that can be used throughout the program cycle for learning about and assessing trust, perceptions, collaboration, influence, and sustainability. We will also compare and contrast several software tools for different types of SNA applications; including through demonstrations. *Level: beginner, intermediate. (Balcony C)*

- **Walking the talk: Using PDIA and co-designing with policymakers to use data and digital tools for development decisions.** *Vinisha Bhatia, Development Gateway*
Last year, we found that often results data are neither useful nor used to make planning and allocation decisions. When decision-making needs aren't aligned with the available results data, it's a big problem. Given the development community spends approximately US \$2.8 billion on MERL each year, we're seeking to flip this narrative -- and change our approach. Join us for a discussion about approaches for incentivizing data use, and empowering data users. We will be ready to share preliminary findings and hope to learn from you as well. *Level: beginner, intermediate, advanced. (Balcony D)*
- **DHIS2 and its place in the M&E world.** *Nicola Hobby, Tim Harding and Sarah Searle, BAO Systems*
As the preferred health information system for 47 countries, DHIS 2 has become the gold standard for cloud based data capture, analysis, and publishing. Its extremely flexible data models allow for a wide variety of applications from large multinational implementations, to entire country health ministries, to small targeted projects. BAO will be providing a practical overview of DHIS 2, its current use cases, and the myriad of ways it can be deployed and used. *Level: beginner, intermediate. (Balcony E)*

14.45-15.15 Break for some ice cream!

- Take a quick break and get some ice cream. Talk to 3 people you don't know about their favorite Maturity Model or take a minute to walk the "MERL Tech Maturity Model gallery." Don't forget to check out the awesome demo tables!

15.15-16.45 Afternoon Sessions (choose one)

- **Qual data hackathon: A collaborative workshop for improving use of tech-derived qual data.** *Karen Greiner and Prabin Nanicha Shrestha, Equal Access Nepal*
This workshop is an opportunity to "hack" (collaboratively create) ways to operationalize tech-derived qualitative data. The workshop will begin with a brief presentation of the RAAM model: Data for Reporting, Action, Advocacy and Motivation. The model establishes a typology of qualitative data applications. The hackathon will be (de)structured using the "Open Space" method, which allows

participants themselves to shape the direction of conversation, within the general theme of “making good use of qualitative data.” *Level: beginner, intermediate, advanced. (Academy Hall)*

- **Beneficiary registration and tracking: The good, the bad, and the ugly.** *Leslie Wingender and Alicia Imbody, Mercy Corps*

This is a hands-on session to exchange experiences and examples of beneficiary registration tools and tracking systems. We will present several examples that highlight the consistent challenge, followed by a demonstration of the data flow for a new program that builds on past experiences from around the world. Participants will engage in a rich discussion sharing their own successes and lessons learned in an effort to improve our field’s effectiveness in this fundamental aspect of our work. *Level: intermediate. (Vista)*
- **Is open source overrated?** *Courtney Roberts, Moonshot Global; Herb Caudill, DevResults; Matthew Heck, TechChange; Andy Green, Sonjara; David McCann, Digital Impact Alliance (DIAL); Laura Walker McDonald, SIMLab*

This panel convenes a diverse bunch — open source evangelists, owners of proprietary ICT4D product companies, strategists, and thought leaders — to discuss pros and cons of open source solutions. The Digital Principles highlight open source as a value, but is this a public good that is slowing us down and requiring us to implement inadequate solutions? This panel explores issues around what is open source, and what type of solutions will (and should) prevail; and what factors are the most important for determining success and uptake. *Level: intermediate, advanced. (Balcony B)*
- **The growing world of ICT social entrepreneurs (WISE): Is social impact significant?** *Dale Hill, Independent Consultant; Jacob Korenblum, Souktel; Christopher Robert, Dobility, Inc.; Jerusha Govender, Data Innovator and South African M&E Association; Roger Nathaniel Ashby, OpenWise; Nick Martin, TechChange*

Join us for a discussion with founders of companies in the MERL Tech space who aim for social impact to discuss what we know about the world of ICT social entrepreneurs (WISE) and what motivates them. We’ll explore aspects of representation in this “world”, unpacking what may be an ongoing digital divide. Finally, we’ll discuss the role of evaluators in helping to measure the social impact of social entrepreneurs. Who are the main clients for this type of evaluation -- social entrepreneurs themselves or social impact investors? Is the impact of WISE significant? If so, how can we encourage growth? *Level: beginner, intermediate, advanced. (Balcony C)*
- **Data quality in the age of lean data.** *Julie Peachey, Progress out of Poverty Index (PPI); Sam Schueth, Intermedia; Christina Villella, MEASURE Evaluation; Woubedle Alemayehu, Oxford Policy Management (OPM)*

This session will prompt a lively discussion about several different aspects of data quality including new issues arising from the use of mobile survey technology; challenges in the quality, security, privacy and confidentiality of mHealth data; and whether collecting data via alternative methods such as SMS, IVR or call centers has an impact on data quality. Please come and add your experiences and questions to the discussion! *Level: beginner, intermediate, advanced. (Balcony D)*

- **Best practices for SMS and IVR Survey design.** *Charles Lau, RTI International; Eduardo Jezierski, InSTEDD; Joseph Agoada, InSTEDD*
Interactive voice response (IVR) and short message service (SMS) are powerful tools to conduct fast and inexpensive surveys. Drawing from our methodological research and practical experience, we will introduce IVR and SMS and provide concrete guidance for optimizing these surveys. We will focus on three specific topics: (1) writing introductions and questions that produce scientifically valid data; (2) optimizing survey design (mixed modes, retries, scheduling, etc.) to encourage response; and (3) following technology best practices for implementing small to large surveys. *Level: beginner, intermediate. (Balcony E)*

16.45-17.30 Wrap-up and Close Out

- **Where do you sit on the Maturity Model?** *Maliha Khan, Independent Consultant*
Now that we have some ideas on what a "MERL Tech Maturity Model" might look like, how does your organization or your practice measure up? Let's find out! You'll need that photo you snapped of your favorite model as a reference, and we'll provide the rest. **(Academy Hall)**

Day 2: Friday, September 8, 2017

8:30-9.00 Registration

- **Coffee and Registration**

Wake up, grab coffee and find your friends and your seat before the event begins.

9.00-9.30 Welcome and Opening Talk

- **Evaluation in today's political, social and technological climate.** *Kathryn Newcomer, President, American Evaluation Association (AEA).*

We like to consider evidence-based policy and data-driven decision-making the new normal. But are they really? How does the current political, social and technological climate impact on evaluation practice in public and non-profit sectors? What are the characteristics of the 'fixed' and the 'growth' mindsets when it comes to evidence-based policy and what are the challenges for evaluation? How can evaluators navigate the tension between producing evidence to demonstrate accountability versus producing it to promote learning? And how can evaluators contribute to helping decision-makers learn from evidence? **(Academy Hall)**

9.30-10.00 Morning Lightning Talks (plenary)

- **Researching teens in one of America's most violent cities.** *Laura Scanlon, Girl Effect*
In this talk we'll show how girls from highly marginalised backgrounds, using breakthrough research technology, shed light on one of America's most violent and forgotten places - Saginaw, Michigan. In 2012, the city was called the most dangerous place in America to be a woman and FBI statistics revealed a violent crime rate of 3.5 times the national average. We worked with 17 girls who, over a 3-month period, researched their own communities, interviewing other girls like them, along with family and community members, to uncover the story behind the statistics. In the process, we learned how shared identity contributes to authentic, accurate research findings and the role that mobile technology can play.

- **Using SMS to remind pregnant women of antenatal appointments in Guinea.** *Rajeev Colaco, RTI*

We will present our findings from the USAID/Guinea StopPalu project pilot study that tested the use of short message service (SMS) using FrontlineSMS as an alerting system to remind patients of upcoming antenatal care (ANC) appointments. We will also present our preliminary findings from a formative evaluation that aims to determine if pregnant women who receive SMS reminders are more likely to attend follow-up ANC appointments than those who do not receive them.

- **Making big data accessible and useful.** *Kelly Skeith, Freedom House and Dan Kheloussi, DataKind DC*
Freedom House's "Freedom in the World (FIW)" index, is a yearly survey and report that measures the degree of civil liberties and political rights around the world. FH worked with DataKind to organize and visualize 11 years of FIW index and sub-indicator data to make historical data easier to access and compare and to inform strategic planning for their programs and help human rights organizations worldwide. We will share how we created an interactive tool to enable analysis and comparison of FIW data against external data sources, across countries and time, as well as visualizations of the FIW data (for public use).
- **Innovations in socio-technical integration for monitoring, evaluation and research in peacekeeping support operations.** *Jesus Melendez, Cabot7*
To support reconstruction and maintenance of the 'social fabric' damaged or lost during conflict, while working on rehabilitation of livelihoods and sustainable development, an innovative approach to Monitoring, Evaluation, Research and Learning is required. Remote Sensors, Mobile Networks, Crowd Sourcing and Big Data Analytics provide the innovation platform and tools, however it is successful data fusion, data minimization, human systems integration and innovative community management best practices that will translate peacebuilding outcomes and outputs into meaning for stakeholders and populations.
- **Dashboards for impact and activity monitoring with partners.** *Amanda Yembrick, MedicMobile*
Medic Mobile's Standard Package is a low-cost, open-source, hosted platform containing tools, resources, and support designed for community-based care. It can be implemented by even the smallest organizations and clinics in challenging settings as an out-of-the-box solution. In this talk, we'll share what we've learned about monitoring antenatal care impact through dashboards and our experiences of walking partners through dashboard reports.

10.00-10.30 Coffee/Tea Break

- Take a break for some networking. Find someone works in a different sector than you, but who is at the same level on the 'maturity model.' (They'll have the same color sticker on their nametag). Find out what you have in common. Don't forget to stop by the vendor demonstrations!

10.30-11.30 Early Morning Sessions (choose one)

- **Partnering with data scientists to make big data accessible and useful.** *Kelly Skeith, Freedom House; Kate Sciafe Diaz, TechnoServe; Jonathan Wang, Delta Analytics; Dan Kheloussi, DataKind DC*

In this interactive session, representatives from data science volunteer organizations and their NGO clients will share out the data science projects and tools they've worked on. They'll describe the challenges of doing big data projects, and the ways they can inform strategy development, project design, and advocacy. The panelists will then work with participants to identify projects they might bring to data science volunteers and provide tips on working with a volunteer team of data scientists. *Level: intermediate M&E with beginner quant skills. (Academy Hall)*

- **Lying with maps and other adventures in spatial data.** *Tim Shifflett and Chase Gruber, MSI*

Is your map really telling the story you want to tell? Recent technological advances have put GIS into the hands of every development professional, leading to an explosion of GIS in the aid industry but also opening the door to unintentional misrepresentations. This session will highlight commonly made cartographic mistakes, proper applications of spatial technology, and define simple rules to follow when working with spatial data. *Level: beginner. (Vista)*

- **Mobile case management for multi-dimensional accountability.** *Emily Tomkys Valteri, Oxfam and Dr. Christopher Robert, Dobility/SurveyCTO.*

At this session, we will explore how using a mobile case management system can help facilitate collection, management, and response to community or beneficiary feedback. At Oxfam, feedback is about the right to be heard and the duty to respond. Therefore, mechanisms should be established that enable community members, volunteers, partners, the public, and other stakeholders to give feedback, and for that feedback to be used to improve programming. *Level: beginner, intermediate, advanced. (Balcony B)*

- **Making open data on results useful.** *Taryn Davis, Development Gateway; Reid Porter, InterAction*

Through the Initiative for Open Agriculture Funding, Results Data Initiative, and research on “avoiding data graveyards,” we have learned much about how to make shared results data more useful. In this session, attendees will have the opportunity to explore results data published to the International Aid Transparency Initiative (IATI) to see if the data actually allows them to answer questions on how “successful” a project was. We will then open a discussion to share our learnings from previous research, and takeaways from the hands-on exercise on how to make published results data more useful for learning and analysis. *Level: beginner, intermediate, advanced. (Balcony C)*

- **Selecting the right data-collection tool: Make-or-break your system.** *Laurie Markle, Akros.*
If you are at the MERL Tech conference, you already know the value of data. Most of your programs already have a tool in place. But how do you know if you are using the most effective data system? The tool itself is almost as important as the data: only with an appropriate tool, will you be empowered to capture usable, useful, and accurate data. Knowing this, Akros takes a platform-agnostic, careful, conscious, and constructed approach to selecting the correct data collection tool for each project. Join us to learn how we do it! *Level: beginner, intermediate, advanced. (Balcony D)*
- **Qualitative coding: From low-tech to high-tech options.** *Charles Guedenet and Anne Laesecke, IREX; Danielle de Garcia, Social Impact*
This session will offer an introduction to the qualitative coding process followed by hands-on practice using excel and Dedoose for coding and analyzing text. Many projects collect qualitative data such as interview responses and focus group discussion transcripts but then struggle to make sense of the data. Excel spreadsheet templates, a low-tech option, are helpful in sorting and analyzing small data sets while Dedoose, an online tool, is particularly useful for collaborative projects and larger data sets. *Level: beginner, intermediate. (Balcony E)*

11.30-12.30 Late Morning Sessions (choose one)

- **Blockchain in the real world: Seeing refugees and land tenure as a trust issue.** *Chase Freeman, Management Systems International (MSI); Shailee Adinolfo, BanQu; Nick Martin, TechChange; Anahi Ayala Iacucci, Internews (moderator)*
At this session, we will help participants understand and discover the driving force of blockchain and distributed ledger technologies. Following a participatory overview of blockchain and how it functions, we'll hear two case studies: connecting refugees and the world's poorest to the global economy through a proprietary blockchain-based platform and structuring an alternative and more robust land tenure system in Ghana vis-a-vis blockchain technology. This session will be audience-focused and we will encourage high-levels of participation and discussion. *Level: beginner, intermediate, advanced. (Academy Hall)*
- **Unleashing the power of interoperable data.** *Sarah Hennessy, Feedback Labs; Marc Maxmeister, Keystone Accountability*
Many of us collect feedback from the people we seek to serve. How can we make it more powerful and useful by combining it with feedback other organizations receive? This session will explore how connecting datasets from different organizations can lead to more powerful interactions with our shared constituents. We will discuss the barriers to such data interoperability and how they might be overcome. *Level: intermediate. (Vista)*

- **Consent and ethics in the Information Age.** *Zoe Dibb, Laura Scanlon and Clare Webb, Girl Effect*
TEGA is a digital qualitative research methodology developed by Girl Effect. In this session we will discuss how our team of ‘paranoid optimists’ developed solutions to overcome safety and ethical challenges when collecting digital data from hard to reach groups. We will practically demonstrate a number of safety and security features including as SMS-operated Help Button and a new Digital Recruitment app that showcases our ‘engaged consent’ process. *Level: beginner, intermediate, advanced. (Balcony B)*
- **The Google Form Dojo: Become a form building ninja.** *Samhir Vesdev, IREX*
This is a no-frills, hands-on workshop on Google Forms—a useful and free tool for building forms and collecting feedback. Bring your device and join this workshop to explore all that Google Forms can (and can’t) do to make our MERL lives more efficient, productive, and impactful. *Level: beginner, intermediate. (Balcony C)*
- **Where is the knowledge on better Knowledge Management?** *Haneen Malallah, Oxfam; Jennifer Heettner, JDC.*
The field of knowledge management (KM) is not relatively a new one, especially within certain disciplines and practices (e.g. private sector, law firms). Yet, its application in the international NGO sector has been uneven and sporadic, and is more of a recent phenomenon. This round table discussion will look at areas of the field that have been successful and where there are areas for growth. We will explore ideas related "old school KM" and "new school KM" as well as invite participants to share successes and challenges related to technological solutions the support KM. *Level: beginner, intermediate, advanced. (Balcony D)*
- **Innovations in evaluating the impact of environmental interventions.** *Anupam Anand and Geeta Batra, Global Environment Facility, Independent Evaluation Office (GEF-IEO)*
How do we leverage technological innovations for evaluating environmental projects? We invite you to join us to learn about the experiences of the Independent Evaluation Office of the Global Environment Facility (GEFIEO) using innovative technology and tools, machine learning, geospatial and econometric methods. *Level: beginner, intermediate, advanced. (Balcony E)*

12.30-13.30 Lunch & Live Demos

- Take a break, reconnect with your friends and peers in MERL and technology, and check out a vendor demo or two.

13.30-14.00 Afternoon Lightning Talks (plenary)

- **How to buy M&E software and not get bamboozled!** *Josh Mandell, DevResults.*
There's no way to guarantee M&E software will work for your team, but there are some very simple things you can do during procurement and add to your contracts that protect your team and position you for optimal user experience. How do you ensure your system will work as promised? How do you establish clear roles and expectations between you and your technology partner? How do you hold your technology partner accountable for poor user experience? How do you avoid burning money on unused software? In this lightning talk, you'll hear about the best practices that DevResults has learned over the years (the hard way) and make clear recommendations for teams buying software from any software vendor.
- **Finding, fostering and funding the curious.** *Nick Hamlin, Global Giving*
GlobalGiving is making a big bet - that organizations that are curious and focused on learning are making the world a better place at a faster rate than those that are not as focused on learning. We're putting our money where our mouth is, and have created a system – linked with the GlobalGiving web platform - that tracks and rewards nonprofits for learning with funding to carry out their work.
- **Once upon a time, data analysis was for the few... Now, we're in an era of visual exploration for all.** *Behar Xharra, Keshif.* Data feels senseless in tables until analyzed for meaning. Early analysis tools focused on generating infographics. Working with data was tedious and complex, and interaction was an afterthought. With bigger and far-reaching data, rapid data exploration from multiple perspectives is even more crucial, and not just for specialist, but for all. Hear about a new approach to visualization and exploration using Keshif, with an example revealing the political risk landscape of Bangladesh based on over 10,000 incidents.
- **Visual storytelling: Learning from MERL through visuals.** *Katherine Haugh, USAID LEARN*
This lightning talk will discuss when, how and what to do in order to understand and tell stories with MERL data. We will describe key ways, means and tips on how to tell stories visually and use data to influence and improve your work.
- **What's not to "like"? Measuring digital campaigning impact.** *Lina Srivastava, Creative Impact and Experience Lab (CIEL)*
In a world of "likes," impressions, and up votes, what can you rely on to tell you if your campaign or project has actually led to change? This lightning talk will dive into ways to evaluate your culture change projects.

14.00-15.00 Early Afternoon Sessions (choose one)

- **Participatory problem-solving: How do we harness the power of big data analytics for M&E?** *Jerusha Govender, Data Innovator and South African M&E Association*
Data analytic tools and sources of large data sets presents great opportunity as well as challenges to evidence generation. The session will present South African cases and lessons of big and small data analytics in monitoring and evaluation. Session participants will engage in an interactive problem-solving exercise to source qualitative insights into the perceptions around the gaps to big data analytics implementation, scale-up, data access, and skills. *Level: intermediate. (Academy Hall)*
- **Machine learning and Artificial Intelligence (AI).** *Gabriel Krieschok, Peace Corps; Toni Maraviglia, Uptake; Neeran Saraf, LORE*
Machine Learning and AI are poised to disrupt any sector that uses data to research, communicate, and learn. Join us for a panel discussion where you will learn about how machine learning and AI are disrupting MERL, hear case studies from two organizations (Uptake and Lore.ai) making use of these new tools, and stay for our open Q&A where we will chat about hype cycles, ethics, accessibility, and the uncanny valley of chatbots. *Level: beginner, intermediate, advanced. (Vista)*
- **Are we ready for innovation and adaptive management?** *Anahi Ayala Iacucci, Internews; Leslie Wingender, Mercy Corps; Jacqui Watson, Praekelt; Danielle de Garcia, Social Impact; Linda Raftree, Independent Consultant*
There is lots of talk about how technology enables innovation and adaptive management, but what about the rest of the equation? How do we enable our people and organizations to be more open and able to generate, integrate, and iterate on new ideas, approaches and tools? How do we set up responsive human and institutional systems and space for experimentation? What needs to be in place to truly be innovative, adaptive and responsive? Join us for a lively discussion on how to create environments that foster and enable change. *Level: beginner, intermediate, advanced. (Balcony B)*
- **Small data for big decision-making.** *Brianna Losoya Evora, Aspen Network of Development Entrepreneurs (ANDE); Kate Sciafe Diaz, TechnoServe; Alan Guedes, Vera Solutions*
Big data has the development sector abuzz. Algorithms can now uncover hidden patterns in beneficiary behavior, predict when a person is at risk of disease, and tell us where on the globe slavery is most likely to occur. Given that the Big Data Revolution is upon us, it's tough not to ask the obvious question...is small data still relevant? *Level: beginner, intermediate. (Balcony C)*

- **The human touch: Acting on survey metadata for oversight and quality control.** *Rebecca Chapman, Equal Access.*
So your tech works, but do your surveyors? Cloud-based survey management is a powerfully convenient tool in our ICT4D toolbox, but with that power comes a responsibility to ensure that data is accurate, high-quality, and in line with survey methodology and randomization protocols. Learn tips and tricks to make your metadata work for you to track survey progress, as well as strategies for data validation and to address data quality quibbles as they arise. *Level: beginner, intermediate, advanced. (Balcony D)*
- **Excel and mobile collection: The 20 skills that solve 80% of M&E problems.** *Leslie Sage, DevResults*
As use of mobile collection tools has grown, so have the snags in linking data sources to indicator results. These hurdles can be addressed before data is ever collected with a few design considerations in mind. Participants will walk away with understanding of the 10 most common pitfalls in designing M&E plans and tools, plus expertise in the 10 most useful Excel skills for managing data. This collection of tips and tricks comes from years of experience in helping scores of projects re-organize their data and structure their surveys. Anyone can implement these few practices to cut time spent on data wrangling, to reduce human errors, and to make data more useful for decision-making. Whether the goal is to manage data in Excel, ArcGIS, DevResults, or any other platform, these skills and concepts will save time and streamline the path from survey to insight. This hands-on session is suitable for any beginner- or intermediate-level practitioner who uses spreadsheets, or anyone who makes beneficiary surveys or reporting templates for data. If you don't learn something useful, you'll be refunded two chocolate bars for your time. *Level: beginner, intermediate. (Balcony E)*

15.00-15.30 Break

- Take a break and pick your last session of the conference. Find someone works in a different sector than you and who is at a different level on the 'maturity model.' (They'll have a differently colored sticker on their nametag). Ask each other about your MERL Tech practices and get some tips!

15.30-17.00 Late Afternoon Sessions (choose one)

- **Game Night MERL Tech: Digital Principles edition.** *Laura Walker McDonald, SIMLab; Jacob Korenblum, Souktel Digital Solutions; Tobias McNulty, Cactus Consulting Group; Alexandra Robinson, USAID; Krista Baptista, DAI; Barbara Willett, Digital Impact Alliance (DIAL).*
Enjoy a little light relief with a serious purpose... Ever considered using the Principles for Digital Development as evaluation criteria? Help SIMLab and DIAL put this

approach to the test. Four contestants represent their programs in MERL Tech's first game show! You the audience will decide who takes home the prize, but you're all winners: you'll leave with a new understanding of how to apply these principles as standards to improve programming and shed light on impact. *Level: intermediate, advanced.* **(Academy Hall)**

- **Big data, big problems, big solutions series: Incorporating responsible data principles in institutional data management.** *Alvaro Cobo-Santillan and Jeff Lundberg, Catholic Relief Services (CRS); Paul Perrin, University of Notre Dame; Gillian Kerr, LogicalOutcomes Canada*

The nonprofit sector produces a wealth of data that plays a fundamental role in the strategic and operational decision making and learning. Nevertheless, many organizations face major challenges with storing and integrating data produced in the field, hence limiting decision and learning capacity. Data warehousing and integration is an approach that could help fill this gap. However, it raises challenges in terms of responsible data management. This session will discuss the major conceptual, programmatic and technical considerations needed to implement responsible data principles and approaches, at different levels (field, region, global) and scenarios. *Level: beginner, intermediate.* **(Balcony B)**

- **How the Simpsons make data use happen.** *Amanda Makulec, Excella Consulting; Barb Knittel, John Snow Inc.*

What do the Simpsons have to do with health information systems? Join this interactive design sprint for a hands-on experience learning how characters and stories could be one key in cracking the data use nut. You'll leave with new tools for understanding users in tech and no-tech contexts and learn our do's and don'ts of using human centered design in complex system-strengthening projects.. *Level: beginner, intermediate, advanced.* **(Balcony C)**

- **Offline/online user-centered design.** *Khwezi Magwazi, Praekelt Foundation and Kecia Bertermann, Girl Effect.*

This workshop is designed to explore the research to content continuum, using Girl Effect's Girl Effect Mobile global digital platform as a case study. The session will focus on keeping the user at the centre of designing content, from initial research, designing an impact framework, designing content mapped to impact and a theory of change and tracking impact. The session will highlight the iterative nature of this process, and how re-research and examining 'real-time' data helps keep the user (in this case, adolescent girls) at the heart of designing content and redefining and revising features and content based on participation from girl users. The importance of utilizing both online and offline mechanisms for a holistic viewpoint of the user will be featured. Participants have the opportunity to explore the research to content continuum with examples from their own projects, and will leave the session having an understanding of how to involve their target users in all elements

of the research to content continuum. *Level: beginner, intermediate, advanced. (Balcony D)*

17.00-17.30 Wrap-up and Close-out

- **Something old, something new...** *Maliha Khan, Independent Consultant*
What are some of the key learning points from the two days together? What will you be doing more of? Less of? What new ideas are you borrowing from someone you met or a session you attended?

17.30: Hands-On Demos and Happy Hour Mingling

- **MERL Tech Happy Hour:**
Join us for an informal, open bar happy hour to visit demo tables, continue chatting with MERL Tech colleagues, and develop shared solutions to some of our toughest challenges.

Demo Tables include:

- **A Better Way to Manage Results with DevResults:** *Josh Mandell, DevResults.* [DevResults](#) provides specialized results management software and expert guidance for development organizations. We make it easier for you to manage your work and use your data.
- **Solar power with Voltaic Systems:** *Julia Connors, Voltaic Systems.* [Voltaic Systems](#) is a portable power company based in Brooklyn, New York. We design rugged solar systems to power smartphones, tablets, laptops and IoT devices in the toughest conditions around the world.
- **High-quality MERL with SurveyCTO:** *Christopher Robert and Faizan Diwan, Dability.* Learn how you can use [SurveyCTO](#) to collect data you can truly trust – without consultants, and without breaking the bank.
- **Advancing Organization-Wide MERL with Indicata:** *Arshak Hovanesian, Synergy International Systems.* Development organizations use [Synergy Indicata M&E Software](#) to manage their organization-wide portfolio, track the performance of projects, and measure the achievement of strategic outcomes.
- **Lifelong Learning with TechChange:** *Nick Martin, TechChange.* [TechChange](#) has a online MERL Tech diploma program for working professionals and prospective graduate students. The 16-week program includes a series three facilitated online

courses, on-demand courses, workshops, 1-on-1 mentorship, capstone projects, job placement services, and more.

- **Collaborative M&E and RBM software with DevAlto's LogAlto:** [Eugenie Catta](#) and [Sarah Diop](#). [DevAlto Technologies'](#) software solution [LogAlto](#) can increase the capacity of NGOs, foundations and development projects in data collection, reporting, data visualization, M&E, result framework design and knowledge management.
- **Surveda with RTI International:** [Adam Preston](#). [Surveda](#) is a free, open source tool for conducting polls using text messages, voice, web and more. Step-by-step, Surveda guides participants through polls and collects real-time results. Surveda shrinks the gap between audiences and pollers, taking the pulse of the people anytime and anywhere there's mobile phone service.
- **BAO Systems:** [Nicola Hobby](#). [BAO Systems](#) provides end-to-end DHIS 2 hosting, configuration, and training services. DHIS 2 is the leading open-source M&E web-based platform used in nearly 60 countries for the development sector.
- **Real-Time Data Cleaning & Validation with ISG and FINCA:** [Michael Klein](#). Talk with [International Solutions Group](#) (ISG) and [FINCA International](#) about ValiData – the recently debuted data validation tool. ValiData assesses survey data for statistical consistency and accuracy. Using a battery of statistical routines and machine learning protocols, ValiData identifies outliers and anomalies and flags them for correction (or confirmation). The result is a clean dataset, ready for analysis as soon as the last survey is completed.
- **Data Solutions for Social Change:** [Taylor Robinson](#), [Vera Solutions](#). Vera Solutions builds cloud and mobile apps designed to amplify the impact of the social sector. Join us for a demo of Amp Impact, an indicator management and performance tracking app, helping organizations track targets and results for their indicators in real time.
- **m360:** [Joy Cheng](#), FHI360. [m360](#) is a mobile platform that responds to the need for survey tools and information systems that provide quality, timely and relevant data to inform decision making at every level. Features demonstrated will include instant visualizations; dashboards for multiple stakeholders; offline, multi-tablet surveys; communication of databases via SMS; and remote monitoring of M&E devices at scale.
- **Mobenzi:** Maryanne Smith. [Mobenzi](#) provides technology and professional services to organizations involved in research, data collection, logistics and community service delivery.

Post-Conference Follow-Up

- **MERL Tech News**

We will be publishing a series of posts on [MERLTech.org/news](https://merltech.org/news) covering the keynotes, plenaries, lightning talks, and breakout sessions. As a conference participant, you will be automatically added to the distribution list to receive them as they are published.

- **ICTworks**

ICTWorks is the premiere news source for ICT and Development conversations. As a conference participant, you will be automatically added to the distribution list to receive them as they are published.

- **MERL Tech Working Group**

We encourage all MERL Tech participants to join the MERL Tech Working Group to explore the intersection between MERL and technology. Please sign up here:
https://groups.google.com/forum/#!forum/merltech_forum