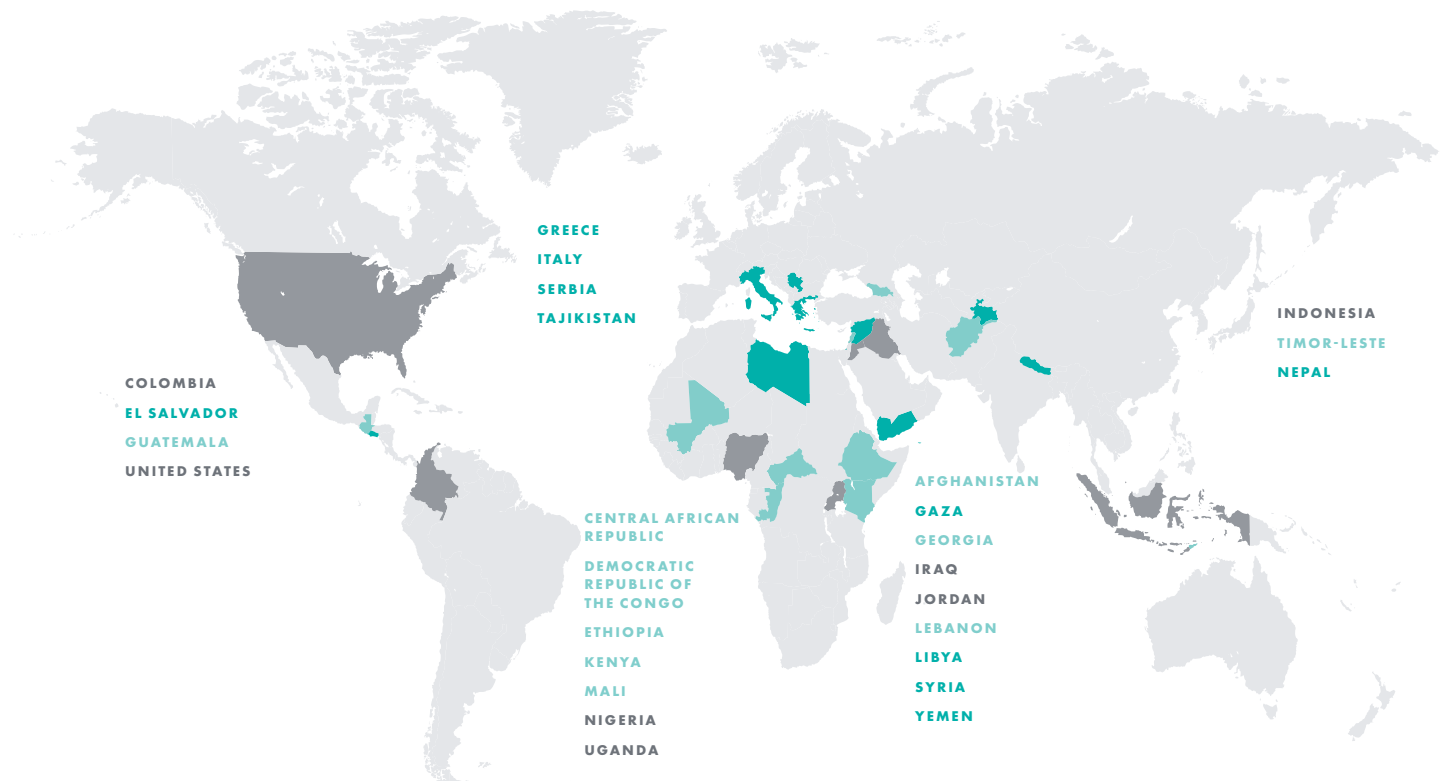MERCY CORPS

# TECHNOLOGY

# FOR IMPACT

Mercy Corps' Technology for Development (T4D) team collaborates with field teams and external partners to unlock new possibilities and reach more people through the power of technology.

**OUR VISION**

A world of digital inclusion and opportunity where the ethical use of technology empowers secure, productive and just communities.

*27 countries are now home to Technology for Impact initiatives and/or Cisco Meraki networks installed as part of our partnership.*

■ *Technology for Impact*
■ *Meraki Network*
■ *Both*

GREECE
ITALY
SERBIA
TAJIKISTAN

INDONESIA
TIMOR-LESTE
NEPAL

COLOMBIA
EL SALVADOR
GUATEMALA
UNITED STATES

CENTRAL AFRICAN
REPUBLIC
DEMOCRATIC
REPUBLIC OF
THE CONGO
ETHIOPIA
KENYA
MALI
NIGERIA
UGANDA

AFGHANISTAN
GAZA
GEORGIA
IRAQ
JORDAN
LEBANON
LIBYA
SYRIA
YEMEN

# 2019 ANNUAL IMPACT REPORT

The world continues to face unprecedented challenges, with some 70 million people displaced from their homes due to conflict and the effects of climate change—a 50 percent increase in the last 5 years alone. Mercy Corps, a team of more than 5,500 humanitarians, works in over 40 countries around the world to help address these challenges and help people build better, stronger lives. We mobilize communities, collaborate with companies, and activate partner organizations and agencies to deliver breakthrough ideas that make a better world possible.

Partnerships have always been at the heart of Mercy Corps' approach to humanitarian aid and development. The challenges the world faces are simply too massive and complex for any one organization to tackle alone. Our five-year, industry-leading Technology for Impact partnership with Cisco enables us to extend the impact of existing programs and innovate with bold, new technology solutions to help improve lives in some of the world's most vulnerable communities. We have reached more than 5 million individuals with our technology-based work in the first 2 years of this partnership.

In Year 2, we built on ideas generated in Year 1 for how to infuse technology into our programs. We moved those ideas forward, building connections across our organization, developing relationships with some 32 local and global technology partners, and implementing new solutions—all with the goal of transforming aid and development through technology. Along the way, we've shared outcomes, best practices and lessons learned from our digital technology endeavors both internally and externally. We are grateful for the many opportunities to collaborate at industry events and in smaller, more intimate settings. We will continue to share with, and learn from, others in our sector.

Thanks to support, technology, expertise and collaboration from Cisco, Mercy Corps' Technology for Development team has been working closely with field teams in 17 countries to implement innovative digital technology solutions. We're collaborating with Mercy Corps' technical experts in areas such as peace and conflict, agriculture, and cash to integrate relevant technology into their work. And, we're a leading voice in the development of Libra, a cryptocurrency with the potential to bring millions of people into the global financial system that has excluded them for generations.

As we assess technology's impact in our current programming, we're keeping our eye on the bigger picture. We're always looking for opportunities to expand successful projects, moving from specific implementations to larger, transformational systems that leverage technology's full potential. At the same time, we remain mindful of our responsibility to ensure ethical implementation of digital technologies, protecting the privacy, safety and dignity of the people we're helping as we unlock new opportunities in this increasingly digital world.

In this Year 2 Impact Report, you'll find highlights from our efforts to move from ideas to real-world impact, forge new partnerships and build sector capacity as we redefine what's possible at the intersection of technology and humanitarian aid and development.

**Alan Donald,** Chief Technology Officer
Mercy Corps

*Read the Year 1 report here.*

## YEAR 2 HIGHLIGHTS

**5** MILLION
people have benefited from Technology for Impact programming to date, including 3.7 million in Year 2

**22** PROGRAMS
are incorporating innovative, tech-enabled programming supported by the Technology for Impact partnership

**37** PARTNER ORGANIZATIONS
are now working with Mercy Corps on Technology for Impact programming, including 18 added in Year 2

# TECHNOLOGY FOR IMPACT INITIATIVES

The Technology for Impact partnership is a 5-year collaboration between Mercy Corps and Cisco. Cisco has invested a total of $10 million to support seven specific initiatives aimed at accelerating digital solutions to build a better world.

❯ **COMMUNICATION SECURITY AND DATA PROTECTION AND PRIVACY**
Exploring potential security gaps in Mercy Corps' current communications and data protection models, tools, policies and procedures so we can enhance security and ensure regulatory compliance.

❯ **DATA-DRIVEN DECISION MAKING AND ANALYTICS**
Integrating multiple data sources into program management and crisis analytics tools to generate more relevant, timely information and help Mercy Corps teams make more precise, effective decisions.

❯ **BENEFICIARY IDENTITY AND INFORMATION MANAGEMENT**
Bringing complementary technology components, capacity and procurement/inventory processes into a single ecosystem to enable faster, better beneficiary registration and information management systems.

❯ **DIGITAL COMMUNITIES**
Providing reliable, actionable information to communities through a safe, accessible digital ecosystem to help them engage more equitably with community power holders, plan for their futures and respond to changes in their environment.

❯ **FIELD TECHNOLOGY TESTING PROGRAM**
Funding trials of new and emerging technologies to expand Mercy Corps' capabilities and develop innovative solutions to advance humanitarian aid and development around the world.

❯ **SOLUTION DISSEMINATION AND REPLICATION**
Building awareness of technology solutions and replicating them internally and externally to sustainably scale Technology for Impact initiatives.

❯ **FIELD NETWORKING INFRASTRUCTURE**
Deploying the latest, most secure connectivity hardware across our offices and field locations to enable centralized equipment management, reduce costs and ensure faster, more secure communications.

# THE RIGHT PEOPLE AND PARTNERS

In over 40 countries around the world, Mercy Corps designs programs that not only save lives, but also improve them for the future. This requires a deep understanding of local challenges, expertise in a variety of fields and ongoing collaboration to ensure all the right pieces are in place.

In Year 2 of the Technology for Impact partnership, we've dedicated time and effort to building the ecosystem of Mercy Corps internal experts and partners we need to make tech-driven transformation possible. This means equipping our field teams with technology to do their own jobs better, while building their capacity to use technology to deepen and scale their impact.

## HIGHLIGHTS

**69 offices in 18 countries**
can now communicate more effectively and reliably within our global organization thanks to upgraded Wi-Fi with Cisco Meraki networks

**197,000 +**
new users connected with resources and information in Year 2 thanks to Wi-Fi sites installed in Colombia, Italy, Uganda, Puerto Rico, Greece and Serbia

**153% increase**
in team members reporting it was easy to complete daily tasks with improved connectivity

# Keeping our teams connected and secure

**CISCO MERAKI NETWORKS HELP MERCY CORPS TEAMS IN HARD-TO-REACH AREAS CONNECT, COLLABORATE AND WORK EFFICIENTLY IN THE FIELD**

In countries like Sudan, Somalia or Afghanistan, some of the greatest challenges Mercy Corps faces emerge before we ever get out in the field. When the systems we rely on for day-to-day functions—such as electricity, internet access and transportation—fail or are inconsistent, we're less efficient, effective and able to focus on solutions for program participants. The Technology for Impact partnership includes a $1.5 million in-kind donation of Cisco products to improve connectivity and security in Mercy Corps offices, and it's already making a difference.

Over the past year, the Mercy Corps IT team has been working to improve internet connectivity through a combination of hardware, bandwidth and electrical infrastructure upgrades. These changes have resulted in significant improvements.

An initial assessment revealed that 45 of our 145 offices had internet connections deemed unacceptable. As of June 2019, this number has dropped to 19. Offices with poor connectivity still exist in Afghanistan, the Central African Republic, Ethiopia, Liberia, Mali and South Sudan. In Ethiopia, we've made some improvements to connectivity, but the government monopoly on internet access leaves us no options in some areas of the country—a situation we hope will change in the coming years.

Faster and more secure internet access not only improves our ability to get our job done—it's also crucial for inclusion efforts across Mercy Corps. When our global workforce of more than 5,500 people can connect and communicate easily, our teams have better access to a diverse pool of talent, and all of our team members can take advantage of more opportunities for career growth.

Cisco Meraki networks are are also providing better visibility and control over internet traffic from Mercy Corps headquarters, giving our IT team the ability to prioritize essential sites and platforms in environments with limited bandwidth (email, internal platforms) while deprioritizing less essential ones (YouTube, social media sites, etc.).

"Our sector has struggled with poor connectivity for years, and it is encouraging to see telecom networks finally reaching into some of the most remote and challenged areas of the world," says Michael Boeglin, Mercy Corps chief information officer. "We are getting very close to ensuring all of our team members have access to reliable and fast internet access."

In Year 3, we will continue to roll out equipment to an additional 18 countries and 45 offices, connecting the global Mercy Corps community and freeing our teams to focus on transformative programming instead of troubleshooting their everyday tech.

# Wi-Fi access aids Venezuelan refugees and migrants

Economic conditions in Venezuela have continued to deteriorate in the past year, intensifying what has been called the worst humanitarian crisis in the Western hemisphere. The country's economic and social collapse has forced millions to flee their homes—with many seeking refuge in Colombia. The United Nations estimates there will be 5.3 million Venezuelan refugees and migrants by the end of 2019.

Mercy Corps has been collaborating with NetHope, a consortium of global nonprofits focused on solving humanitarian challenges with technology, to help Venezuelans access the information and resources they need and stay connected to loved ones. Specifically, we partnered on a project to deploy and install Wi-Fi equipment at 85 sites where Mercy Corps and 11 other organizations are supporting people in need.

To date, these sites have made it possible for more than 115,000 individuals to access the internet.

## Lesson Learned

Mercy Corps teams work with people in small communities—many of whom speak local languages and dialects outside of the majority. This creates a challenge for machine learning models, which require high volumes of data to "learn" and develop algorithms for analysis. In collaboration with Translators without Borders (TwB), Mercy Corps set out to build a machine learning data set to better understand food scarcity among speakers of Levantine Arabic, but our platforms didn't have enough data for the model. By working with TwB to better understand what the model requires and identify higher-volume sources of data, we hope to create a more robust tool and produce accurate, useful results.

*Collaboration*

# Deeper insights into civic engagement

### THE OPPORTUNITY

As more people around the world get access to digital communications technology, civic engagement is increasingly moving online. Understanding how citizens interact with government and how governments respond can help uncover ways to improve relations and empower citizens. Technology can create excellent opportunities to break down traditional barriers between local governments and their citizens.

### THE COLLABORATION

The Technology for Development team is working with Mercy Corps' Governance team to incorporate our tools for assessing the information ecosystem, digital landscape and digital literacy levels into existing tools that measure community engagement. We hope to eventually use these updated tools to inform the best technology platforms for implementation in civic engagement contexts.

With deeper insight into how people engage with each other and local governance structures online, our program teams can better analyze and act on what they learn as they work to improve representation and accountability mechanisms.

MEET: ADRIENNE BROOKS
MONITORING & EVALUATION ADVISOR
TECHNOLOGY FOR IMPACT

*"By incorporating these tools across multiple sectors, we are deepening the ecosystem of technology around the organization."*

# NEW IDEAS
# NEW CHALLENGES

Innovation doesn't happen in a vacuum. The Technology for Impact partnership creates opportunities for Mercy Corps to test and pilot new ideas, but we're often working within existing programs. That requires training staff who are already immersed in established processes and working to solve specific participant challenges. The risk of failure with bold new ideas is high—and so are the stakes.

Trying new ideas within fragile contexts requires diligence and ethical protocols every step of the way. We start small, testing tech-enabled programming in ways that won't negatively impact programs that are already working. And, we track impact closely, gathering data to assess if and how technology is making a meaningful difference.

## HIGHLIGHTS

**2,200 people in Uganda**
will be able to buy what they need with improved security and faster transactions using digital tokens in our cryptocurrency pilot program

**71 young people in Iraq**
have participated in two initial programs for mindfulness and stress reduction using virtual reality therapy

**4 out of 7 technology pilots**
were deemed viable proofs of concepts with potential to scale

# Virtual therapy for real trauma

**IN IRAQ, YOUNG PEOPLE AFFECTED BY TRAUMA FIND A SAFE SPACE AND MUCH-NEEDED CALM THROUGH VIRTUAL REALITY**

In Iraq, generations of children have grown up in an environment marked by conflict and civil unrest. Growing up surrounded by violence and instability can cause severe trauma, chronic stress and post-traumatic stress syndrome (PTSD) that can impact these children's lives for years. Since 2015, Mercy Corps has been working to help young people in Iraq cope with trauma by creating physical safe spaces where they can learn, play and work with therapists.

Now, we're using virtual reality (VR) to expand the program, creating digital safe spaces with the potential to make psychosocial treatment less expensive and accessible to more people.

"In doing some research on the applications of VR, we came across a program using VR to treat military veterans with PTSD," says Ric Shreves, director of emerging technology on Mercy Corps' Technology for Development team. "As we dug deeper, we found programs using VR with first responders and refugees in Israel, but nothing specifically for adolescents. We saw great potential for adding that to our existing youth programming in Iraq."

Mercy Corps partnered with the Seattle-based company Virtual Therapeutics to design a program aimed at young people who have experienced trauma in Iraq. We looked at virtual reality as another tool for treating psychosocial trauma, integrating it into two existing programs: One called PLLAY (Providing Leadership and Life Skills for Adolescents and Youth), which is focused on in-person counseling, creative activities and group work; and another called Innovate, which gives young people safe spaces to participate in sports and physical activity.

Young people use VR for guided meditation activities, and the results of the pilot have been promising so far. Among 30 participants in one VR therapy program, well-being scores improved by 48 percent.

In sessions that can range from six to 10 minutes, participants may experience walking down a path surrounded by butterflies and flowers, or standing in a tranquil lake while speaking with a trained facilitator.

"When we see the [VR], it feels like we are in a very calm environment," says Sana'a, a 17-year-old participant. "I felt happy, and when I went home, I was still thinking about the session."

After seeing such positive initial results, the Mercy Corps team is now taking a closer look at the program's impact, testing to see if the positive results are repeatable and assessing which variables are making the biggest difference—the VR technology itself, the specific content participants are viewing, or the combination of VR and other therapeutic activities.

"We're trying to zero in on where the therapeutic faculty is, and then see how we can extract lessons learned from that and create a template we can scale to other programs and populations," says Shreves.

*The Yafe app draws on local expertise to flag hate speech on social media, while prompting offline conversations about the impact of divisive language.*
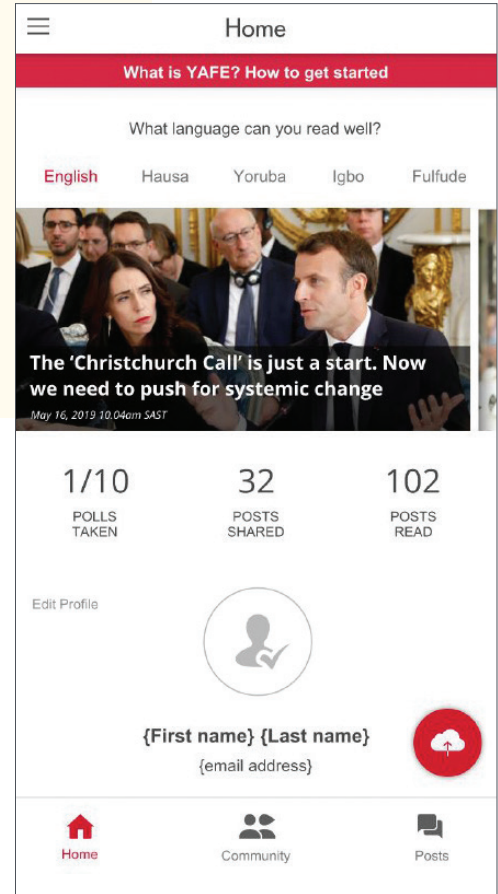
# Hacking away at hate speech

Hate speech can be more than hurtful—it can sow divisiveness and incite violence. In Nigeria, dangerous speech and fake news have become major influencers of violent conflict, sparking attacks, reprisals and counter reprisals, all of which put individuals and the social fabric of communities at risk.

Mercy Corps designed a competitive event held in Lagos in November 2018, the "Hate Speech Hackathon," to uncover innovative solutions to educate people about dangerous speech online and in social media. The winning idea that came out of the three-day event: A mobile app called Yafe that helps users identify dangerous speech in social media and local news, report it, and create a digital community to share information about how to identify and respond to dangerous speech online.

The app will also help Mercy Corps teams gather data and analyze spikes in dangerous speech to understand its connection to violent incidents. Mercy Corps is working with local partners to develop the app and will pilot it with 20 religious and youth leaders.
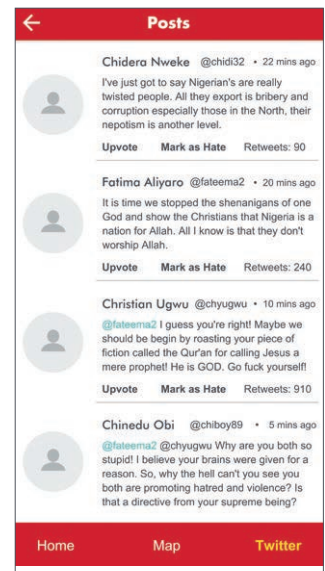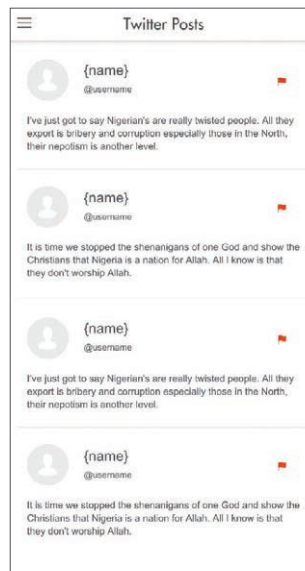
## Lesson Learned

Experimenting with technology in the field means not only trying out new ideas, but also managing existing, sometimes prohibitive constraints. In July 2019, monsoons in Nepal triggered life-threatening floods, displacing 75,000 people and destroying more than 18,000 homes. Mercy Corps has been developing a radio-based early warning system to help warn people of potential floods. Sensors that detect high water alert communities downstream so they can take the necessary precautions. Early versions of the system used SMS-based text alerts, but because heavy rainstorms can impact cellular networks, reliability was inconsistent. Unfortunately, our experimentation hit a roadblock when we learned that the radio frequency our consulting partners were using to build the program is restricted by the Nepali government.

*Collaboration*

# A more comprehensive view of complex crises

**THE OPPORTUNITY**

Mercy Corps works to address complex crises around the world—where multiple challenges including conflict, climate change and poverty converge to put millions of people at risk. Technology can help us better understand the factors that contribute to crises, equipping our teams with the information they need to respond more effectively.

**THE COLLABORATION**

The Technology for Development team is working with Mercy Corps' Humanitarian Response team to integrate technology into our approach to analyzing complex crises. We're using a range of analysis tools to inform a richer, real-time understanding of high-risk environments.

In Nigeria, for example, the team is using data-analysis tools to assess security incidents and identify risks related to conflict events, while using satellite imagery to see infrastructural damage on the ground after an incident.

**MEET: HANNA CAMP, SENIOR ADVISOR TECHNOLOGY FOR IMPACT**

*"This is an opportunity for us to develop outside partnerships and internal systems that will reduce the time and effort involved in converting disparate data sets into integrated, real-time, actionable information."*

# AN ETHICAL APPROACH TO CHANGE

Beyond our own programming, Mercy Corps plays an influential role in the broader community of humanitarian aid and development. We share what we learn with partners and peers. And, we're on the forefront of efforts to reimagine what's possible, informing new ideas with the potential to transform lives around the world.

We're a leading voice in the global movement to apply existing and emerging technology to the world's toughest challenges. With four decades of expertise working through disaster and complex crises around the world, we use our influence to ensure new programs and platforms are relevant to the people they're intended to serve, and that aid organizations and governments address the potential for abuse and unintended consequences of technology.

## HIGHLIGHTS

**7 external advisory groups**
feature members from the Technology for Development team advising in areas including blockchain, mobile technology, digital IDs and the use of data

**Partnered with Harvard and Yale**
to research information access and the possible link between access to connectivity and well-being among migrants in Europe

**7 partner NGOs**
have adopted our recommended data management software for a cash program that serves 100,000 households in Colombia

# Revolutionizing financial inclusion with Libra

**MERCY CORPS IS LEADING AN EFFORT TO BRING THE BENEFITS OF CRYPTOCURRENCY TO PEOPLE HISTORICALLY LEFT OUT OF THE GLOBAL ECONOMY**

In Year 1 of Mercy Corps' partnership with Cisco, we highlighted the potential for cryptocurrency and distributed ledger technology in humanitarian aid and development. In Year 2, we're at the leading edge of a movement to make that potential a reality.

As a founding member of the Libra Association, Mercy Corps is working with leading organizations in financial services, technology, blockchain (or distributed ledger technology), venture capital and academia to develop Libra, a stable, global, open-source cryptocurrency that can bring new opportunities to the world's unbanked populations.

Although the effort is in its early days, we believe it could spark a revolution in financial inclusion. Currently, 1.7 billion people around the world don't have access to a bank account, but a billion of those same people do have mobile phones.

"Libra could put new opportunities to save, send and spend money into the hands of those people—connecting them more closely with their local and global economy, and giving them transformed opportunities to provide for themselves, their families and communities," says Mercy Corps CEO Neal Keny-Guyer.

One of the biggest areas cryptocurrency has potential to make an impact is in remittances. As more and more people are leaving their home countries for work and sending money back for their families, they're paying fees for electronic transfers that can reduce their take-home income substantially. A low-cost, stable cryptocurrency can ensure more money stays with the people who earn it. Another area of impact: countries experiencing hyperinflation. In the volatile economies of places like Venezuela or Zimbabwe, people who leave their assets in local currency are losing money every day. Virtual currency can help them preserve their wealth.

And for refugees, cryptocurrency can be the difference between fleeing with nothing and having the resources they need to rebuild their lives. They can convert assets to cryptocurrency before leaving their homes, and then convert it into the local currency when they find safety.

Mercy Corps is part of the Libra Association's Social Impact Advisory Board, along with the microfinance nonprofit Kiva and the financial inclusion nonprofit Women's World Banking. As part of the board, we'll help ensure Libra lives up to its potential to be broadly inclusive of the populations we work with around the world, and we'll help select the social impact projects that receive funding from the association.

We'll also bring insights from a cryptocurrency pilot currently under way at Mercy Corps. In Uganda, we're working with the cryptocurrency exchange Binance to pilot the use of digital tokens among a test population of consumers and merchants. The program will help us understand more about the digital and financial literacy education required to help people learn to use digital wallets and tokens, and how to effectively bring local merchants into a cryptocurrency exchange.

# Sharing knowledge and tools

Effective humanitarian response requires coordination and collaboration across multiple stakeholders, both internal and external. When considering cash and voucher assistance, this network spans a variety of people—each with their own expertise and approach. Synthesizing these various viewpoints behind a single vision can prove challenging. Technology adds another layer to this challenge, as individuals may have varying levels of experience and comfort with tech platforms and processes.

In the spirit of Mercy Corps' organization-wide emphasis on collaboration, we have focused on simplifying technology coordination in cash and voucher programming across various providers and contexts. Core technologies are pre-integrated for faster setup, while new providers are able to join the mix by taking advantage of new open API standards called APIture. Because of Mercy Corps' expertise with cash and voucher programming, we are also continually sought out to advise others through in-country working groups, consortia and global advisory groups.

## Lesson Learned

In Karamoja, Uganda, Mercy Corps is working on a large food development program, which involves leveraging existing participant data from the World Food Program (WFP), an organization that has worked in the region for many years. While sharing data between our organizations was a core commitment of the program, this presented numerous challenges that have slowed overall program implementation. These challenges include complying with national and international data-sharing regulations, developing governance for this type of partnership, addressing data-protection concerns on both sides and creating a process for sharing data across two different platforms. These negotiations took over a year to complete, requiring approval from WFP headquarters and others. The experience will help us make data sharing with UN agencies through technical means easier in future partnerships.

*Collaboration*

# Seamless integration to improve cash distribution

### THE OPPORTUNITY

Over half of Mercy Corps' humanitarian response interventions involve distributing cash or vouchers to help people in vulnerable situations buy what they need from local markets. These programs have long used technology in the form of pre-loaded debit cards, SMS-based electronic vouchers, biometrics and basic data collection, and they often face challenges when it comes to connecting the dots between systems.

### THE COLLABORATION

The Technology for Development team is working across Mercy Corps to help program teams use an integrated tech stack, which enables a variety of transfer mechanisms—from e-vouchers to bulk digital payments—to work seamlessly with biometric registration or mobile data collection. The goal is to make these individual components quick to purchase, set up and use, while maintaining flexibility to combine with other platforms.

We're now working on tools and processes to make this an option for any new cash program, whether it's implemented by Mercy Corps or a peer organization.



**MEET: ROSA AKBARI, SENIOR ADVISOR TECHNOLOGY FOR IMPACT**

*"We're trying to create elegant, streamlined integrations between platforms that may seem simple to the eye, but require a lot of work to make that simplicity possible."*

# A HUB FOR TECH INNOVATION AND SUPPORT

Integrating technology into Mercy Corps' work around the world requires more than simply adding new tools to our portfolio. We also need to inspire and train our teams and assess the true impact of the technology we're implementing.

The Technology for Development team works as a central resource for Mercy Corps' global organization, supporting teams with a wide range of expertise and tech savvy. For example, we help support the AgriFin program, which gives small-scale farmers access to digital financial services, education and new markets for their products, helping them adapt to the impacts of climate change and grow their income. We also help teams in remote field offices move from paper to digital tools. Along the way, we're working to measure the impact of technology, so we're better equipped to find new opportunities and make the case for integrating tech in the future.

## HIGHLIGHTS

**58 attendees from 17 countries**
learned more about using technology in aid and development at two Mercy Corps-hosted technology workshops

**2,200+ team members**
learned to improve digital security in their work after completing security training, with 86% able to detect phishing messages

**40 new proposals**
were supported, helping to win funds in the tens of millions for programs leveraging digital technology

# Measuring the impact of technology

**TECHNOLOGY IS OFTEN PRAISED FOR IMPROVING EFFICIENCY, REACH AND COSTS—BUT HOW DO WE KNOW IT ACTUALLY DOES?**

As we move from ideas to implementation, we're building tools and processes to evaluate the impact we're having by integrating technology into our programming.

Specifically, we're measuring impact in four key areas where we believe technology will create meaningful improvements.

### Scale
Digital tools help us reach larger populations of participants—beyond the people we can reach through in-person, on-the-ground interactions and in geographies broader than the specific communities where our field offices are located. For instance, migrants in Europe are sharing information we provide with their families, friends and personal networks in destination and home countries, spreading verifiable information about migrating to people we might not have been able to reach through in-person interventions.

### Efficiency
In pilot programs that integrate technology into our existing work, we're collecting pre- and post-participation surveys so we can not only measure efficiency gains or improvements in impact, but also identify the source of those improvements. For example, in field offices where we've installed Cisco Meraki Wi-Fi networks, we are able to show how internet speed has improved.

### Program quality improvement
Beyond efficiency and time savings, we are also measuring how new processes and technologies are helping improve program quality. In the case of our beneficiary registration tech platform, we can measure improvements in program processes and data

flows that can help other teams see how the platform can be useful to them.
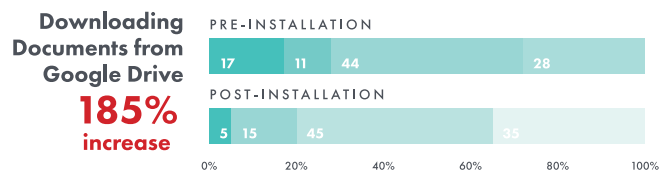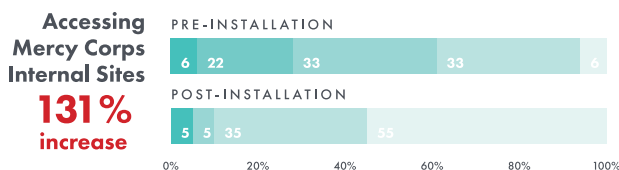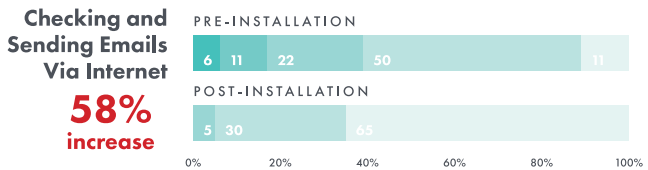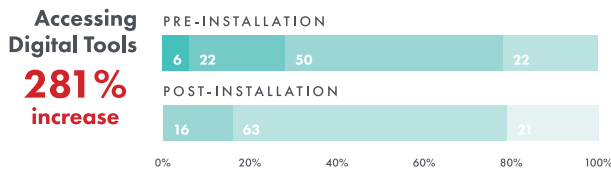
### Comparing program impact
Where possible, we're assessing how the addition of technology is making a difference by comparing results from tech-enabled programming and similar programs without a tech element. In the virtual reality (VR) psychosocial therapy program in Iraq, some participants are using VR, while others are getting access to psychosocial therapy through in-person or group activities without VR. By surveying participants and comparing the results, we're able to see if VR is contributing to additional well-being outcomes.

With these metrics and evaluation activities, we're building a body of knowledge around how to measure and learn from the work in each of the seven Technology for Impact initiatives. This helps us evolve and refine our tools as we replicate and scale successful projects. For example, we developed a toolkit for our Signpost program—a digital platform to give refugees access to information and resources—which has been used across Mercy Corps for surveys in multiple regions and contexts. With minor adjustments for local contexts, we now have a standardized tool for technology landscape assessments.

Internally, measurement and evaluation resources have also been shared between the VR program in Iraq and another VR program in Jordan.

We'll continue to measure and test the effectiveness of our tools to learn the precise value each technology adds for our teams and the people we help, and to better understand where and why we may not have achieved the results we anticipated.

## Improvements in ease of day-to-day tasks with upgraded Wi-Fi

**LEVEL OF DIFFICULTY**

VERY DIFFICULT | DIFFICULT | NEITHER EASY NOR DIFFICULT | EASY | VERY EASY

**Accessing Digital Tools**
**281% increase**

PRE-INSTALLATION: 6 | 22 | 50 | 22
POST-INSTALLATION: 16 | 63 | 21

**Checking and Sending Emails Via Internet**
**58% increase**

PRE-INSTALLATION: 6 | 11 | 22 | 50 | 11
POST-INSTALLATION: 5 | 30 | 65

**Accessing Mercy Corps Internal Sites**
**131% increase**

PRE-INSTALLATION: 6 | 22 | 33 | 33 | 6
POST-INSTALLATION: 5 | 5 | 35 | 55

**Downloading Documents from Google Drive**
**185% increase**

PRE-INSTALLATION: 17 | 11 | 44 | 28
POST-INSTALLATION: 5 | 15 | 45 | 35

# Protecting participant data



Mercy Corps works with vulnerable populations in fragile contexts around the world, and it's crucial that our programming doesn't introduce new risks. In the first two years of the Technology for Impact partnership, the Technology for Development team has collaborated with the IT team to improve communication and data protection across Mercy Corps. Our goal is to transform how Mercy Corps handles personal information and sensitive data to ensure that, in current programming and new pilots, we're keeping program participants' data secure.

Over the past two years, we've rolled out a global policy for responsible data management, educated team members on security best practices and released secure messaging guidelines to help team members understand which messaging applications to use based on location and security context The Technology for Impact partnership made it possible for us to jump start this important work, and the IT team will now be responsible for moving it forward.

# Lesson Learned

Our work often relies on experts from other backgrounds, and the realities of humanitarian contexts can present a striking contrast to private-sector environments. Adapting and deploying technology generally designed for a more developed context can be incredibly challenging in places with civil unrest such as Gaza, restrictions on humanitarian aid as in Syria, or highly constrained environments like Yemen. Sometimes, the technology itself does not adequately address the specific problem. Other times, it may be difficult to get private-sector experts who are willing to consult on the ground.

*Collaboration*

## Moving existing programs forward with tech

### THE OPPORTUNITY

Mercy Corps teams are experts in areas from agriculture to financial inclusion. When we combine their technical expertise with ideas, insights and support from the Technology for Development team, we create the potential for programming that is not only bold, but deeply relevant to people in the communities we're working with.

### THE COLLABORATION

The Technology for Development team is working with Mercy Corps' Agriculture team on two projects to support small-scale farmers. One involves developing predictive models and maps to show the movement and impact of the fall armyworm, a pest that destroys staple crops such as corn and soybeans. Another collaboration is focused on using remote sensors and geographic information system mapping technology to detect changes in crop health and predict yields on small plots of land.

We're currently working to identify partners and develop initial proofs of concepts for these programs so we can test and scale them in new contexts.

**MEET: JESUS MELENDEZ, DIRECTOR TECHNOLOGY FOR IMPACT**

*"We continue to learn and apply digital technologies across Mercy Corps. In Year 3, we're looking forward to even deeper integration as digital technology moves from a nice-to-have to an essential tool."*

# NOW FOR YEAR 3

As we move into Year 3 of the Technology for Impact partnership, we'll be exploring ways to replicate and scale the programming we've tested, implemented and refined to date. That means extending our work into more contexts and more locations—saving lives, connecting people to critical resources and information, and bringing the transformative impact of technology to people increasingly at risk of being left behind.

Thank you to Cisco, our technology partners, peer organizations, supporters and team members who make up our global community of humanitarians. Together, we're tackling the world's toughest challenges and using technology to make a meaningful difference.

In Year 3, we'll continue exploring new opportunities for collaboration within and beyond our organization, while focusing on key areas including:

❯ *Youth:* We'll continue to support digital literacy programming to equip young people with the tools and skills they need to succeed in a tech-driven world. We're also pursuing funding for our Youth on the Move Continuing Education proposed program in partnership with NetHope, the Norwegian Refugee Council and the UK-based War Child.

❯ *Peace and conflict:* We're collaborating with the Mercy Corps Peace and Conflict teams to tackle the weaponization of information via social media. In Year 3, we'll expand our partnerships with industry experts in multiple sectors to move our Year 2 work forward.

❯ *Financial inclusion:* We will be diving deep into technical issues related to cryptocurrency and distributed ledger technology through Libra and other initiatives while working to improve our internal capacity in these areas.

❯ *Elevating digital literacy internally:* Building on two capacity-building tech summits we held for regional teams in Africa and the Middle East in the past year, we're planning three more summits in regional hubs in Year 3. We're also leading an agency-wide priority on raising digital literacy, which includes deepening our emphasis on data analysis support and incorporating more tools for analysis and visualization, including geographic information systems (GIS) support.

❯ *Improving tech tools:* To increase responsiveness and our ability to track trends and feedback from the people we serve, we're adding a digital feedback option to the standard reporting mechanism used across all of our programs.

❯ *Sharing information with our peers:* We're working on combining quantitative results with experiential learnings across our program, creating robust insights we can share with our peers.

## T4D TEAM

**Alan Donald**
Chief Technology Officer

**Rosa Akbari**
Senior Advisor

**Adrienne Brooks**
Monitoring & Evaluation Advisor

**Hanna Camp**
Senior Advisor

**Mike Dawson**
Senior Advisor

**Farah Haddad**
Program Specialist

**Jesus Melendez**
Director, Technology for Impact

**Meghann Rhynard-Geil**
Senior Advisor

**Alexa Schmidt**
Senior Program Manager

**Alpen Sheth**
Senior Technologist, Blockchain

**Ric Shreves**
Director, Emerging Technology

**Karen Smetana**
Program Manager
Digital Communities

**John Traylor**
Assistant Program Officer

# PARTNERS

ACCENTURE DEVELOPMENT PARTNERSHIPS

ATMA

BUILT-ID

DATAMINR

DATA DISCOVERY PROJECT (UC BERKELEY)

DEVELOPER SOCIETY

DIMAGI

GENIUS TAGS

HYPERLEDGER

MARHUB

NAGIS

PALANTIR

PEACE TECH LABS

SEGOVIA

SIMPRINTS

TRANSLATORS WITHOUT BORDERS

**Peer Consortia**

CASH LEARNING PARTNERSHIP (CALP)

GSMA MOBILE 4 HUMANITARIAN

ID2020

NETHOPE

**Implementing**

CARITAS

INTERNEWS

ITALIAN RED CROSS

IRC

JOEL NAFUMA REFUGEE CENTER

ST MARTIN PARISH

**Funding**

CISCO

FACEBOOK

MICROSOFT

**Advisory**

DO NO DIGITAL HARM INITIATIVE

**Research**

HARVARD

YALE

*"We believe that technology has the ability to significantly transform humanitarian aid and are encouraged to see the impact it's having in enabling Mercy Corps staff and programs to be more efficient, productive and scale to reach more people."*

**—Tae Yoo, Senior Vice President**
  **Corporate Affairs and Corporate**
  **Social Responsibility**
  **Cisco**

**ABOUT MERCY CORPS**

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action—helping people triumph over adversity and build stronger communities from within. Now, and for the future.

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