

**Pathways to scale,  
pathways to results  
for every child**

Global Innovation Centre

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# Introduction



The vision for UNICEF's Global Innovation Centre (GIC), as part of the Office of Innovation, is to inspire and support the scale-up of new technologies and approaches to UNICEF's work and that of our partners to achieve powerful impact for all children. This report reviews the past year, as well as taking stock of how well we've performed against that vision over the three-plus years of our existence.

Applying a demand-driven, centre-of-excellence model, the GIC has supported 85 countries to identify, adopt and adapt innovative solutions. To date, these new technologies and approaches have affected the lives of 115 million people across these 85 countries: directly used by 18 million young people, frontline workers and women, and bringing indirect benefits to a further 97 million children and their communities.







- Seventy five percent or 85.8 million are mothers, community health workers, vaccinators and health facility staff in 18 countries benefiting from digital health platforms and the communities they connect to the health system. These platforms remind parents about actions that keep their babies healthy in the first 1,000 days of life, improve the coordination of vaccination campaigns and bed-net distributions, and manage the availability of life-saving health commodities (see page 16).
- Fourteen per cent or 15.9 million are youth and adults in 60 countries and territories who benefit from the Internet of Good Things (IoGT) and get free, life-saving and life-impacting information through their basic mobile phones. IoGT shares resources on a wide range of topics, including tips for caregivers to support early childhood development, advice on keeping children safe online, and how to recognize, prevent and respond to the spread of diseases (see page 19).
- Eight percent or more than 9.7 million are adolescents, 5 million young people who benefit from the youth empowerment and engagement platform, U-Report, and the immediate community members they share information with in the 42 countries where U-Report is run. These youth engage regularly with UNICEF on this community participation platform to address issues that affect them. Their opinions and data are used to improve policy and programmes, and to provide life-saving information in a timely way (see page 14).
- Three per cent or 3.3 million are frontline workers and programme managers in 29 countries who use the RapidPro platform to power real-time programme management and monitoring. These exchanges help to coordinate Cash Assistance Grant programmes; monitor water, sanitation and hygiene (WASH), and nutrition interventions; and communicate early warning messages to communities (see page 21).

- The remaining 1 per cent, or 300,000, are young people in 8 countries who benefit from participation in the youth-led innovation initiative, UPSHIFT, and members of their communities. These young people learn to become social innovators and create entrepreneurial solutions to problems in their communities. These social impact initiatives include improving eye care among poor communities, apps that help people with disabilities to use public transport and a job board for the visually impaired (see page 26).

The results achieved this year have built on the foundations laid in previous years. Platforms in the GIC portfolio have been strengthened iteratively by continuous feedback from the field and lessons learned, including reflecting on our failures.

## Unintended results

We have also created value in the approaches the GIC developed to support this widespread diffusion and adoption – the ‘how’ is as valuable as the ‘what.’ We have co-created effective pathways to scale within programmes, pioneered a model of blended internal and external governance, and tested the limits of agile talent management and remote working. The GIC has created a momentum that has contributed to transforming and future proofing the organization (see page 8).

None of these results would have been possible without the support of partners who recognized the catalytic impact their networks, expertise and funding could have by investing in the GIC. We are particularly grateful to our founding partners – the Government of the Republic of Korea, the Philips Foundation, and the UNICEF National Committees of Canada, the United Kingdom and the United States.

## GIC 2.0

UNICEF today looks different than it did when the GIC was launched in 2015 and, in part due to our contributions, scaling innovation no longer requires the support it did three years ago. The organization is investing in building its capacity to adopt and adapt innovative solutions, from establishing roles in every region to support the application of technology for development, to mainstreaming solutions from the GIC portfolio as the new normal in programming, and adopting proven and repeatable processes to continue to do so successfully.

This is an enviable position to be in as the GIC enters its final year of funding. We are reviewing where gaps remain at this unique nexus of development and humanitarian programme need, as well as technology and innovation, and how we might play a role in addressing these gaps in the future (see page 33).

Innovation in isolation has limited impact. Together with partnerships around resourcing and uses that connect with local ecosystems and across the Global South, we’ve identified good ideas that benefit thousands and evolved them into solutions that help millions of children. Through sharing our experiences, insights and learning across these ecosystems, we’ve also influenced the external context to create a more enabling environment for others to innovate with and for children

This is what success looks like for us.



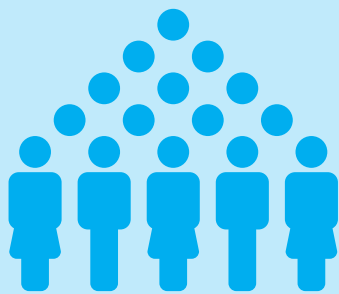
Tanya Accone  
UNICEF Global Innovation Centre

# Global Innovation Centre by the numbers, 2015-2018



**85**

countries supported to identify, adopt  
and adapt innovative solutions and



**115** million  
lives changed

**18** 

million

users / direct beneficiaries  
(frontline workers, young  
people and mothers)

**97** 

million

indirect beneficiaries  
(children, parents and  
their communities)

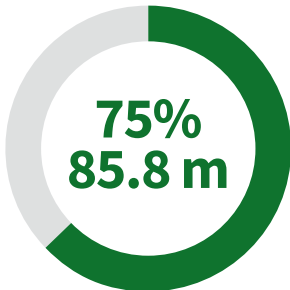
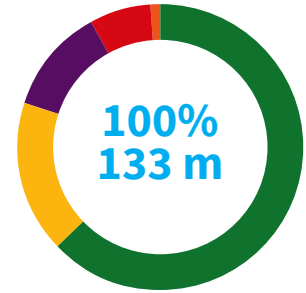
**1** 

billion

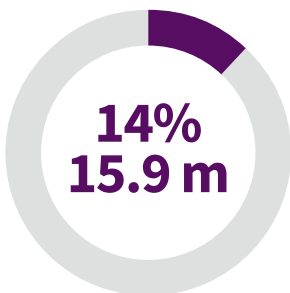
billion messages  
exchanged via the  
RapidPro platform



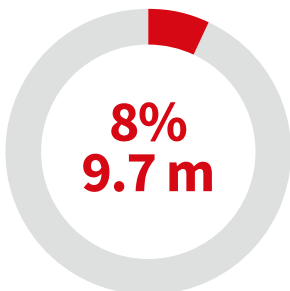
## Of these **133 million beneficiaries**



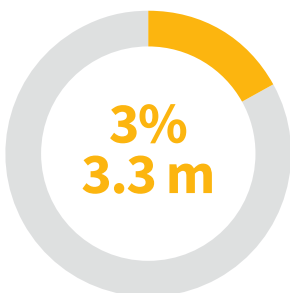
Seventy-five per cent or 85.8 million are **mothers, community health workers, vaccinators and health facility staff using digital health platforms in 18 countries** and the community members they connect to the health system.



Fourteen per cent or 15.9 million are **youth and adults in 60 countries and territories who access the Internet of Good Things (IoGT)** to get free, life-saving and life-impacting information on their basic mobile phones.



Eight per cent or 9.7 million are **the 5 million adolescents and young people who are members of the youth empowerment and engagement platform, U-Report**, and the immediate community members they share information with in the 42 countries where U-Report is run.



Three per cent or 3.3 million are **frontline workers and programme managers in 28 countries using the RapidPro platform** to power real-time information exchanges for improved programme coordination and monitoring.



One per cent or 300,000 are **young people in 8 countries who create entrepreneurial solutions** to problems in their communities through the youth-led innovation initiative, UPSHIFT, and members of their communities.

Data are cumulative to 1 May 2018. Across 51 countries, different solutions built on the RapidPro technology platform are used for U-Report in 42 countries, real-time monitoring in 41, and digital health in 18.



# Scaling for results

The Global Innovation Centre's first home in Kampala.

## Lessons learned on our journey to scaling results for children

Pathways to scale are different from solution to solution and place to place, but the ecosystem and partnerships within each pathway are critical to scaling success everywhere. In supporting the widespread diffusion and adaptation of new ways of working, the 'how' is as valuable as the 'what.' This is why UNICEF's Strategic Plan 2018-2021 identifies innovation as an enabler, and not as an end in itself.

In 2015, the GIC journey began in a repurposed warehouse on Mbuya Hill in Kampala, Uganda.

Since then, we have continued to experiment with different ways of working in line with our unconventional origins. Some approaches have proved valuable, such as pioneering a model of blended internal and external engagement, designing reusable processes, and testing the limits of agile talent management and remote working. There are other aspects that we would do differently, including improving communication, documentation, and tracking evidence uptake.

## Fostering agile teams and talent

At the start, in 2015, the GIC team of seven people was working together in an office in Kampala. Driven by demand for support from other countries, the team soon outgrew what could be effectively delivered via a single location model. With the flexibility to try a different structure and way of working, the team evolved to become nomadic and distributed across the globe to enhance effectiveness and efficiency. We pushed remote work to its limit. In 2016 and 2017, there were 17 team members, living in 11 locations, with 71 per cent who teleworked, 53 per cent who were nomadic, and 41 per cent who worked part-time. Together, this team enabled a 24-hour cycle of support to countries, regardless of location.

This experience, and the tools and approaches the team applied to achieve seamless asynchronous collaboration were included as a case study on remote work: *Extreme Remote Work: The Pros And Cons Of Teamwork Beyond Borders*, shared insights on managing talent, visibility and the limits of technology.

UNICEF's investment in mainstreaming the capability to scale up solutions into core functions has enabled the GIC team to scale down accordingly. As a result, in 2018 the GIC evolved from product-focused roles into a team of eight scaling practitioners.

## Blending governance

The GIC has pioneered a distinct governance and advisory model, convening leading expertise and funding around innovating for children. It operationalized the notion of bringing together people inside and outside the UNICEF family. The GIC Advisory Committee blends the public and private sectors, as represented in its founding members – the Government of the Republic of Korea, the Philips Foundation, and the UNICEF National Committees of Canada, the United Kingdom and the United States.

The Committee provides thought leadership, reviews the GIC's portfolio and progress, leverages access to their networks, and promotes innovations in the portfolio. In addition to the

added transparency, events around the meetings build partnerships around new areas of work being introduced into the portfolio. Young people, researchers, entrepreneurs and academics have contributed their experiences, expertise, networks and strategic analysis of emerging issues and trends on areas such as human-centred design, and youth-led innovation and skills. In 2018, more than 30 experts from across the finance, investment, sustainability, grant, philanthropy, foundation and innovation sectors, and across United Nations agencies were engaged around how to accelerate the journey from pilot to scale (see page 33).

## Taking a "glocal" approach

Systematic, cross-functional collaboration is an enabler of innovation in organizations, and the GIC has benefitted from being setup to be cross-sectoral and cross-regional. This has allowed the GIC to recognize broader trends, opportunities and insights, and connect and share them. By identifying common needs across countries and pooling funding, we have developed solutions that meet the local country demand in a way that is also built for immediate global uptake. Partner coordination dashboards, digital outreach, and chatbots on menstrual hygiene management, cholera and the Zika virus are a few such examples.

This approach fosters South-South cooperation (see page 31) and supports solutions that connect across the humanitarian development nexus. For example, the youth empowerment platform U-Report provided critical information to young people in the Caribbean ahead of hurricanes Irma, Jose and Maria, and continued to engage with young people on development issues afterwards.

As the vision of the GIC extends beyond UNICEF to what others can do for all children, so too the benefits of this work accrue beyond UNICEF to partners, such as the World Association of Girl Guides and Girl Scouts and other organizations that have made use of these platforms, including the International Telecommunication Union (ITU), United Nations High Commissioner for Refugees (UNHCR), World Health Organization (WHO) and World Food Programme (WFP).



## Designing repeatable models

The close collaboration around digital health and related sectors from UNICEF's country level to regional level to headquarters provides a strong and repeatable model of tackling programme-driven challenges and taking innovative solutions to scale. This process has moved through many phases, including:

- undertaking a landscape study to identify and define UNICEF's unique value add;
- jointly exploring, testing and iteratively refining strategic tools;
- developing and packaging methods for implementing;
- creating systems of support;
- establishing operational mechanisms and institutional arrangements;
- consolidating and sharing learning, knowledge and expertise;
- developing, refining and sharing resources for building capacity;
- cultivating ownership of users and stakeholders; and
- making these solutions available as open source global public goods.

A number of strategic tools were produced that contribute to the broader digital health sector. These include UNICEF's Approach to Digital Health, a global strategic framework that will provide guidance and a roadmap to any country office wanting to implement elements of digital health programming into their work; a human-centred design toolkit for designing digital health systems; and an online knowledge repository consolidating all the lessons learned, case studies and tools to date.

## Nudging an organization

One of the influences the GIC has had is as a change maker within UNICEF. As a result, today we no longer require the support to scale innovation that we did three-plus years ago.

Processes for transitioning solutions out of the GIC and mainstreaming them into the core functions of the organization have been established. One such example is the governance mechanisms for the Real-Time Monitoring initiative, which include

multi-sectoral Steering Committee and Working Group structures. Elements of the GIC approach to portfolio management and prioritization have been adopted elsewhere, and the concepts and frameworks for GIC engagement are being used to design other events.

Also importantly, sustainable changes have been made that strengthen UNICEF's ongoing capacity to adopt and adapt technology-based innovations. New Business Analyst roles have been established in each region to support the application of technology in programming. The GIC trained and transitioned implementation support to these roles, and product management for technology platforms is now led by a newly established team in the ICT Division (ICTD) in headquarters.

## What we would do differently

The GIC emphasized support to country programmes as the priority, and until 2017, did not invest capacity in communication. This left a vacuum in which we were not effectively capturing and sharing the work that was being undertaken, or the stories of what a difference our work made in the lives of children and their communities. This lack of communication about our work and its value was amplified across social media, and it did not allow us to adequately recognize our donors and partners.

Many activities were undertaken to catalyse the sharing of knowledge and expertise, and to disseminate learning and experience. These included launches, running events, delivering conference addresses, panel sessions, webinars, training, managing communities of practice, papers, newsletters and more. However, we did not effectively share these accomplishments through other channels, nor track these engagements as we ideally should have.

Having recognized this need for improvement, we are taking action in the remaining period to improve our knowledge sharing, especially of documentation and resources that others can use, adapt and apply. A series of open-source resources will be released, including a dedicated microsite on digital health, and a number of toolkits on human-centred design and youth-led innovation.



# Theory of change

## IMPACT

Accelerating results for children through innovation and influencing the external context to create an enabling environment for others to innovate with and for children

## OUTCOMES

- ▶ Increased availability, and use of, real-time information in programming.
- ▶ Increased youth engagement and empowerment.
- ▶ Increased access to information, learning and innovative solutions to address the barriers to achieving this.
- ▶ Increased knowledge, understanding and buy-in around innovation as an enabler of accelerating results for children within UNICEF and in the wider development ecosystem around children.
- ▶ GIC positioned as a Centre of Excellence for innovating at scale.

## OUTPUTS

- ▶ Proven real-time innovations deployed at scale.
- ▶ Proven digital health solutions deployed at scale.
- ▶ U-Report deployed at scale.
- ▶ Proven approaches to youth-led innovation like UPSHIFT deployed at scale.
- ▶ Proven access to information and learning innovation solutions deployed at scale.
- ▶ Other innovations in new emerging areas developed and deployed at scale.

- ▶ Formalized global strategic partnerships including technology partners; funding partners, including for country implementation; use partners; and select academic partners.
- ▶ Accelerate to Scale Fund
- ▶ Global Innovation Centre
- ▶ Broker South-South collaborations

- ▶ Documentation of lessons learned on how to scale innovation solutions, and results.
- ▶ Development and packaging of learning agendas, course materials, toolkits and resources to build capacity and deliver training/training of trainers internally and externally.
- ▶ Knowledge sharing of insights and learning within UNICEF.
- ▶ Knowledge sharing of insights and learning in wider ecosystem.

## ACTIVITIES

Innovation solutions

Partnerships and South-South cooperation

Insights and learning



# Our Portfolio:

## Accelerating progress towards the SDGs by scaling cross-cutting innovations

The Global Innovation Centre has responded to demand from more than 85 countries to support the adoption and adaptation of innovative solutions. To date, these new technologies and approaches have been used by 18 million users, directly benefiting a further 97 million children, women and their

communities. Each of these innovations contributes to the Sustainable Development Goals (SDGs), supporting the implementation of this agenda from the local to global levels so that all people – including all children – will live in a safer, cleaner, more equal and more prosperous world by the year 2030.

UNICEF GIC portfolio	SDGs
U-Report	
Digital Health	
Internet of Good Things	
Real-time information	
Human-Centred Design	
UPSHIFT	
GIC	



# U-Report

U-Report is a messaging platform for adolescent, youth and community participation. Designed to address any issue that affects children and young people, U-Report collects information directly from children and young people or their parents to improve policy and programmes. U-Report can also provide life-saving information to the most vulnerable in a timely way.

Currently, U-Report has over 5 million members in 42 countries, with 10 more countries anticipated to launch in 2018.

## 2017 results

During 2017, the GIC supported 12 new countries in launching U-Report across 5 continents. During this time, U-Report had the highest period of membership growth in its history, as the number of countries with more than 100,000 U-Reporters participating increased from 4 countries to 10 countries. On average, a new U-Reporter signed up every 30 seconds.

The GIC is setting the foundations for U-Reporters to be part of the UNICEF Accountability to Affected Populations mandate.

Digital channels grew substantially in 2017 with almost 20 per cent of U-Reporters joining digitally. We expect this to increase in future.

## Pathway to scale

U-Report's pathway to scale has focused on leveraging channels that are widely accessible to the target beneficiaries, minimising the steps and barriers to implementation, and evolving scalable and sustainable business models.

As SMS is a widely-used channel for reaching users with basic phones, we have worked on strategies and partnerships to reduce these costs. Digital channels are vital and will increasingly become a preferred channel as infrastructure improves and access to smart phones increases. With this in mind, we integrated channels such as Facebook Messenger, twitter, Viber and a U-Report smart phone app. Digital channels have the added advantage of being much more cost effective than SMS, and are generally less complex to operate. We also launched a cloud hosting solution that makes it easier for interested countries and partners to access and test U-Report.



With an eye and foot in the future, we have initiatives around chat bots and applying machine learning and artificial intelligence (AI) to improve the speed, relevance and value of the information and services we can provide to U-Reporters.

Launches coming soon will be for Albania, Bangladesh, Belize, Ghana, Honduras, Kosovo, Montenegro, Serbia, and Houston, USA.

## Key milestones

- **2012** U-Report is launched in Uganda
- **2014** UNICEF adopts the RapidPro platform
- **2015** 1 million U-Reporters reached
- **2016** Launch of U-Partners, an integrated case management functionality that automatically flags and tracks messages requiring response by different partners
- **2016** Viber and Facebook Messenger added as channels
- **2017** 500,000 cases managed by partners via U-Partners platform
- **2018** 5 million U-Reporters reached

“

### WHAT USERS SAY

“I don’t know how to explain myself, but in my 15 years this is the first hurricane I’ve ever been through, and it really scared me. But I don’t know how to tell you that the information you sent me was some of the best information I got, and I shared it with my whole family by telephone. Thank you.”

*U-Reporter, 15 years old,  
Eastern Caribbean during  
Hurricane Irma 2017*

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# Digital Health

## Interventions for lasting impact

UNICEF envisions a world where the health and wellbeing of children is improved through digitally enabled health systems in which digital health technologies are used to enhance the quality and reach of vital health information and services for the most disadvantaged children and their families. Digital health is becoming a core part of many governments' broader health strategies. In response, UNICEF has invested in innovative solutions to overcome the traditional bottlenecks of time, distance and coordination to better support community health workers who are delivering frontline services to the most marginalized communities.

The real-time information platform, RapidPro, is a core solution in UNICEF's Digital Health portfolio and a contribution to the health sector that others can adopt and adapt. RapidPro enables UNICEF to

take advantage of the explosive uptake in mobile phone subscribers across the world to help tackle some of the fundamental challenges in the health sector, and to empower women, children and their communities to advocate for quality health services. Many of the digital health interventions powered by RapidPro have been linked into foundational digital health systems such as DHIS2 and OpenMRS, resulting in an easy-to-use experience for governments and reducing duplication and costs.

### 2017 results

In 2017, the number of UNICEF countries using RapidPro increased from 37 to 53, including in 18 countries where digital solutions powered by RapidPro supported UNICEF health programming.

- In Indonesia, RapidPro provided real-time tracking and troubleshooting for the country's largest-ever measles and rubella vaccination campaign, reaching some 35 million children between the ages of 9 months and 15 years.

- In Sierra Leone, RapidPro supported the National Malaria Control Programme to prepare and monitor the distribution of long-lasting insecticide-treated nets to 1.5 million households.
- In Nicaragua, UNICEF helped the government to build a messaging platform for pregnant women in urban areas – in the first phase 45,000 messages were sent to women and their support networks, resulting in improved maternal nutrition for those in the system – which has now been extended to rural communities.
- In Senegal, mInfoSante was developed independently by health workers using RapidPro, and was used to coordinate emergency medical transportation more than 50 times in 2017. The mInfoSante system connects ambulance services to healthcare providers and alerts the medical community to referrals in real time.

In addition, a number of strategic tools and software improvements were produced as contributions to UNICEF's global health work, as well as to the broader digital health sector:

- **UNICEF's Approach to Digital Health:** working with the Headquarters Health Section, the GIC co-authored a global strategic framework that will provide guidance and a roadmap to any country office wanting to implement elements of digital health programming into their work
- A **human-centred design toolkit for designing digital health systems** was produced as a practical programme design tool, and is ready to be used widely by UNICEF and partners
- A RapidPro for Health site was built to consolidate the lessons learned, case studies and tools to date, and to help RapidPro users design, launch and manage digital health interventions
- New **RapidPro health 'modules' and related management dashboards** are under development to make it easier for country offices and government partners to build new elements into their RapidPro health tools, and better manage and respond to the data they collect.

## Pathway to scale

UNICEF's work on digital health began in 2008 in Malawi, where an SMS-based system (an early prototype of RapidPro) was used for the first time to test whether simple mobile phones could help health workers track community health data more accurately than the paper systems that were in use.

In the ensuing years, UNICEF further developed the design of and software for digital health systems many times, in dozens of countries – always with a focus on the goals of reaching frontline health workers, getting critical information to people at community level, and providing real-time information to help health systems actors make better management decisions. The keys to scaling our work in this area have been:

- Focusing on human-centred design throughout the design and deployment of interventions
- Co-creating digital health services with government partners, ensuring their full ownership from the outset
- Investing in robust and open-source software that does not rely on specialized hardware or licensing, and that builds toward interoperability
- Taking a systems-based approach to the design and deployment of different services

## Key milestones

- **2012** First RapidSMS digital health programme (mTrac, Uganda) reaches national scale
- **2014** Launch of Rapid Pro, including deployments in Liberia, Sierra Leone and Guinea as a core part of the Ebola response
- **2015** Digital Health Landscape study completed to better understand the ecosystems and identify where UNICEF could contribute in a way that was unique and complementary
- **2017** The GIC works closely with PD Health to develop the joint Approach to Digital Health and the Human-Centred Design Toolkit for Digital Health Deployments, including extensive field-level engagement with UNICEF and partners to refine the approach and toolkit, and related modules for RapidPro Health
- **2018** The GIC and PD Health launch the joint Approach to Digital Health, and release the Human-Centred Design Toolkit for Digital Health Deployments and newly curated set of digital health resources on the RapidPro Health microsite.



## WHAT USERS SAY



“It is easy to report. Before, I had to remember and write it all down and come back here to the Puskesmas office to report. It used to take four people to prepare the reporting. Now I can report the children I have immunized from anywhere, any time. We need to RapidPro everything!”

*Ms. Enung Nurhayati, the Immunization Coordinator of the Puskesmas, on RapidPro*







# Internet of Good Things

The Internet of Good Things (IoGT) is a UNICEF-led initiative helping to bridge the digital divide and build knowledge societies. While access to the Internet is increasing worldwide – between 2000-2015, global Internet penetration grew 7-fold from 6.5 per cent to 43 per cent – millions of people still lack access to quality, credible information. In some instances, this lack of information can be life threatening; in others it constrains growth within society as well as in the economy.

IoGT as a communication tool hosts mobile-packaged content designed to make life-saving and life-improving information available for free, even on low-end devices.

Local UNICEF country offices and partners take part in the localization of the content embedded in their local IoGT mobile site via a dedicated Content Management System (CMS). Including two-way communication features, the IoGT platform is also used to capture feedback and local best practices from communities through polls and survey functionalities.

## 2017 results

Building on shared value opportunities with private and government partners in 2017, IoGT has launched mobile sites via Free Basics by Facebook with 12 mobile network operators in 12 countries (seven of them new IoGT countries: Algeria, Belarus, Chad, Congo, Honduras, Ivory Coast and Sudan, and, in Uganda, through a partnership with the National Information Technology Authority (NITA).

IoGT is having an impact on all steps of its theory of change. The mobile service helped bridge the digital divide and increased access to the Internet for the most disadvantaged, growing 20-fold from 3 countries in 2015 to 60 countries and territories by the end of 2017.

Messages hosted on the IoGT mobile platform were accessed by 10.7 million users in 2017 and by more than 25 million since its launch in 2015. IoGT is mostly engaging young people. Of its users in 2017, 16 per cent were aged 13-17 years, 47 per cent were

aged 18 to 24 years and 24 per cent were aged 25 to 34 years. loGT brought changes in awareness and knowledge around key life-enhancing areas, and changes in attitudes and behaviours as a result of new knowledge.

### Pathways to scale

Private sector partnerships have been key to the rapid adoption of loGT. Apart from partnerships, the key to scaling up rapidly has been to streamline the deployment process and provide strategic guidance and detailed documentation on mobile content development, negotiation of distribution deals, and implementation of both above the line and below the line promotional initiatives. To achieve such rapid scale, the cross functional loGT team has relentlessly provided technical assistance and country support, and has had to be agile to meet very aggressive launch deadlines.

### Key milestones

- **July 2014** UNICEF signs global distribution agreement with Facebook to participate in the Internet.org initiative as a content partner, paving the way for what would become the Internet of Good Things.
- **Early 2015** Transition from a standalone strategy (one issue = one standalone mobile site) to a more comprehensive “Internet of Good Things collection” approach, broadening available content and languages, and allowing articles to be displayed and reorganized via an algorithm on a dynamic homepage.
- **April 2016** Reaching a key milestone of 1 million users accessing loGT in a single month.
- **December 2017** More than 25 million users have accessed Health, Education and Protection messages on loGT
- **January 2018** First major direct-distribution agreement reached with a leading mobile operator in Eastern and Southern Africa



#### WHAT USERS SAY

“I now provide a balanced meal to my 9-month-old baby and spend more time talking to him.”

*Jessica, female, aged 19-25 years, Zambia*





# Real-time information

Access to credible and up-to-date information about the situation of children is essential to improving their lives and protecting their rights. UNICEF has been investing in the open-source RapidPro platform to gather accurate and timely data, even in remote and hard-to-reach places. The technology allows users to design, pilot and scale direct mobile outreach services without the help of a software developer. The RapidPro platform is used across 53 countries – for real-time programme management and monitoring in 29 countries, which this section focuses on. It is also used in digital health solutions in 18 countries and powers part of U-Report in 45 countries. The GIC also provides support to government and implementing partners around issues such as the capacity to analyse and respond to data, and the rights of community members to get feedback about and understand the data they are providing.

## 2017 results

In 2017, the number of UNICEF countries using RapidPro to gather real-time information increased from 37 to 53, and the GIC continues to support the design and launch processes for countries new to using the platform. In addition, there were two significant areas of work based on mainstreaming the use of RapidPro throughout UNICEF:

1. The GIC helped to mainstream support for the technical deployment of the RapidPro platform as part of a process of global ICT transformation across UNICEF. This included recruiting seven new ICT positions, creating an internal learning curriculum and deployment resources, and delivering a multi-month capacity-building programme to equip business analysts in all seven regions with the knowledge and skills they need to excel as they take on these functions in 2018.
2. A new agency-wide RapidPro Scale-Up Initiative was launched, supported by the GIC along with the ICTD, Programme Division, Field Results Group and Office of Evaluation. The goal was to mainstream the use of RapidPro for planning, testing and scaling-up real-time monitoring systems in many areas including social protection, early childhood development and WASH. The collaboration has allowed UNICEF to facilitate timely course correction during programme implementation; improve the ability of national monitoring systems to deliver results for children; and identify best practices for mainstreaming innovative tools in UNICEF country programmes. Eleven countries participated in 2017 for Phase I of the RapidPro Scale-Up Initiative.





At country level, Rapid Pro is:

- **Strengthening social cash transfers for the most vulnerable in Nepal** – providing real-time programme monitoring and accountability for the Nepal Government’s Child Grant programme, through polling households about the implementation and delivery of the grants.
- **Monitoring sanitation services in India** – monitoring progress towards the Swacch Bharat Mission (Clean India Mission) in the two biggest states in India, Bihar and Uttar Pradesh. Evidence gathered through RapidPro is being used to improve social accountability as well as to design future efforts to mainstream and scale up.
- **Providing early detection of children with disabilities in Palestine** – supporting the early detection of children with developmental delays and disabilities in the national early childhood development (ECD) system.
- **Monitoring emergency cash disbursement in Yemen** – communicating essential messages and assessing beneficiaries’ experiences of the overall process, analysing how funds have been utilized, responding to grievances, and alerting users to new opportunities such as e-payment to assess interest.
- **Increasing birth registration capacity in Cambodia** – integrating with voice recognition software, the system helps local communities monitor the supplies needed to ensure babies are registered as soon as possible after birth – a vital protection method for children.

## Pathway to scale

The GIC’s efforts to have real-time information (as collected by RapidPro) reach scale and be mainstreamed into UNICEF’s work involved transferring capacity from GIC colleagues to ICTD colleagues in headquarters and seven regional focal points (business analysts) that were jointly recruited. This involved the creation of training assets as well as recruiting new expertise to be embedded in each regional office. In working with the coalition to launch the RapidPro Scale-Up Initiative, the GIC is supporting UNICEF’s long-term goal to scale up national real-time monitoring systems in 110 countries by 2021. The Scale-Up Initiative is based on quality programming principles (high evaluability) and was integrated into the country office programming process in order to document progress achieved and extract lessons for future scale-up Innovation. This has facilitated cross-country learning, assessment and documentation

to identify best practices to mainstream innovative tools like RapidPro throughout UNICEF-supported country programmes.

## Key milestones

- **2012** First RapidSMS real-time information system (mTrac, Uganda) reaches national scale
- **2014** Launch of RapidPro
- **2015** RapidPro showcased as a breakthrough technology at ITU Telecom World in Budapest, Hungary
- **2016** RapidPro highlighted at the World Humanitarian Summit in Istanbul, Turkey for its use in complex emergency contexts
- **2016** UNICEF launches the multi-year, global Real-Time Monitoring Initiative. Eleven countries in phase one are funded for national scale up, while also initiating a joint mainstreaming effort with ICTD to train regional and country-level focal points in ICTD for management and support of RapidPro moving forward



## WHAT USERS SAY

“The burden of scavenging for water, sanitation and hygiene (WASH) data is a thing of the past as our stakeholders can now easily go on line and access District WASH data... Most exciting is the ability of the system to be accessed on the go through smart phones.... The initiative has also rejuvenated the interest of communities in the management of their WASH services.”

*Fidres Manombe, Chief Executive Officer of Insiza’s Rural District Council in Zimbabwe*







# Human-Centred Design

## Accelerating results for children by design

Human-Centred Design (HCD) has long played a central role in UNICEF's work. The first of UNICEF's innovation principles is 'design with the user' – making sure that a project takes a user-centric approach. HCD takes this a step further by using a set of tools to tailor solutions for children using repeatable, human-centred methods for creative problem solving and innovation. This approach to solving complex problems and designing more human-centred services takes inspiration from real people, works within market and technological constraints, and ensures the entire design process is rooted in the real world. An HCD approach has huge value for the creation of child-centred policies, programmes and services. It also helps service providers and systems to deliver better results for children. As a methodology for improving the effectiveness of UNICEF's work, HCD is helping to strengthen results across the board.

### 2017 results

In 2017, the GIC worked with UNICEF country offices and their partners in Malawi, Malaysia, Mexico, Myanmar and a number of other countries to apply HCD as a methodology to support more inclusive

and child-centred policies, programmes and services, and to build enhanced capacity of service providers and systems to deliver results for children.

At country level, UNICEF is leveraging HCD to:

- Co-create more child-centred case management services in Myanmar: UNICEF, the Department of Social Welfare (DSW), and social design firm Point B have been working to transition newly deployed Case Managers into the role of systems builders and facilitators. By supporting DSW teams to gain deeper understanding into the local contexts in which they operate and to support newly deployed Case Managers to define their role, including how they will work and where they will focus, the team is using a design-thinking approach that allows Case Managers with diverse skills, experiences and expertise to come together to co-create local case management systems.
- Develop more child-centred country programming in Malawi: Taking a rigorous, design-led approach significantly contributed to the support of an organic Country Programme Document (CPD) design process. This process involved and developed a sense of broad ownership of the upcoming new UNICEF Malawi CPD among UNICEF Malawi's diverse staff and partners.
- Build local capacity and design more child-centred services in Malaysia: Through their 'Design Lab'



methodology, UNICEF Malaysia is continuing to mainstream design for every child. They are increasing the capacity of key civil-society partners to develop and test new interventions directly with end-users; co-creating inclusive public spaces and services with private-sector leaders, children with disabilities and their caregivers, and disabilities advocacy groups; strengthening rural birth registration services; and adapting the Design for Change curriculum with 1,600 children and teachers to help children build skills as creative and critical social problem-solvers.

### Pathway to scale

In order to advance the use of HCD within and around UNICEF at scale, the GIC has worked with country offices to establish models of reference/best practice and to put in place mechanisms for ensuring access to technical expertise and advisory support at scale. The vision of success at scale for this area of work is largely comprised of widespread application and promotion of human-centred design as a strategic mindset and approach for how UNICEF and partners work for children, with a tracking of relative effectiveness and impact of this approach compared to other, more ‘traditional’ models for designing and delivering services for children. By continuing to provide light-touch, dedicated technical support to UNICEF and partners interested in leveraging HCD in their work for children, the GIC is helping ensure strategic focus and use of HCD methods.

In addition, by establishing and helping to coordinate the use of global long-term agreements with a range of design firms from around the world, the GIC is helping UNICEF and its partners connect to expertise and experience to accelerate results for every child by design.

### Key milestones

- **2015** Initiation of flagship project in Myanmar, applying HCD to inform more child-centred services
- **2016** HCD endorsed for scaling by the Global Innovation Centre Advisory Committee at its meeting in Amman, Jordan
- **2017** Development of a global strategic approach to guide the use of HCD within UNICEF: Accelerating Results for Every Child By Design
- **2018** UNICEF named to Board of Advisors for joint initiative of the Bill & Melinda Gates Foundation and USAID to develop a series of HCD public goods
- **2018** UNICEF establishes long-term agreements with a range of design service providers to expand and enhance access to and reach of design expertise within UNICEF and the broader United Nations system



### WHAT USERS SAY

‘It was amazing to see the energy in the room during the design thinking exercises. I have participated in many planning processes but never in one where the energy levels at the end of the day were still high and you could feel the enthusiasm...I had expected some usual turf thinking...but it just wasn’t there. The (design thinking) process demonstrated well what programming jointly means.’

*Representative, Johannes Wedenig, UNICEF Malawi*





UPSHIFT combines some of the leading approaches to youth and adolescent development, social innovation, and entrepreneurship, to empower marginalized youth and adolescents to become social innovators and entrepreneurs.

UPSHIFT empowers young people to identify challenges in their communities and create entrepreneurial solutions to address them. It is built on human-centred design methodologies, which have been tailored for use with marginalized young people. The core UPSHIFT content is modular, allowing UPSHIFT to be adapted to different contexts and to be delivered in different settings – ranging from youth innovation labs to non-formal education centres. Through

a combination of training and mentorship, participants gain valuable transferable skills, including problem solving, critical thinking, creativity, collaboration and leadership.

Young people directly involved in UPSHIFT acquire the ability to generate new ideas and to turn them into action that will ultimately meet unmet social needs for their wider communities. They gain skills for employment and skills for life, including:

- problem solving skills,
- critical thinking,
- creativity and creative confidence,
- communication and leadership skills, and
- collaboration and teamwork.

While young people build skills for life and skills for employment through UPSHIFT; their wider communities benefit from the solutions that are created.

UPSHIFT originated in Kosovo in 2014, as part of the government's youth innovation programme designed to tackle lack of opportunities for youth (in terms of skill development and employment). The programme combines social innovation workshops, mentorship, incubation and seed funding to equip young people with the skills and resources they need to identify problems in their own communities and design solutions for them.

UPSHIFT started to scale up with the Montenegro programme in 2015, and Viet Nam running a pilot in 2015/16. These inspired similar programmes in Jordan and Lebanon as part of UNICEF's youth programming in response to the Syrian crisis.

## 2017 results

In June 2017, the GIC Advisory Committee met in Ho Chi Minh City, accompanied by internal and external partners, to address the issue of skills for

the twenty-first century. The human-centred design approach coupled with country office demand and emerging results led to UPSHIFT being proposed to for inclusion within the GIC portfolio of products to scale up across UNICEF. In 2017 UPSHIFT was also selected by the World Bank to form part of its new portfolio – Solutions for Youth Employment, indicating that early evidence around its impact on youth unemployment was promising.

The GIC recruited a global lead to focus on packaging and supporting UPSHIFT to scale. In November 2017 a workshop was convened in Kosovo, bringing together participants from 22 different countries to share lessons learned to date and plan for the future deployment of UPSHIFT during 2018 and beyond. The output of this workshop is an implementation guide for UPSHIFT, which brings together different approaches to implementation and a range of useful documents.

Alongside the implementation guide, there will be comprehensive UPSHIFT content, which has been re-designed as part of the scaling process. The content includes a Facilitators Guide with step-by-step Activities, a supplementary Participants





Guide and Train the Trainer material, including guidance on how adapt and localize the content. The intention is to provide an open source for the UPSHIFT content, enabling youth organizations around the world to utilize the content and approach.

## Pathways to scale

UPSHIFT is scaling by replication. However, the ecosystem (e.g. culture, education system, environment for entrepreneurship, legislative environment, routes to sustainability) varies significantly by country. UPSHIFT needs to be localized but there are common building blocks and shared experiences. Through the process of scaling, the GIC has been able to package and synthesize these in a way that will reduce the costs and time to implement UPSHIFT and other youth-led innovation programmes across UNICEF.

When UPSHIFT joined the GIC portfolio in June 2017, six countries were running UPSHIFT or similar programmes. By May 2018, a further two countries (Tajikistan and Moldova) had piloted UPSHIFT. Sudan, Ukraine and Macedonia are all starting their pilots in May 2018, with another 20-plus countries actively exploring UPSHIFT for potential uptake.

The GIC has been working through the scaling process to ensure UPSHIFT delivers against UNICEF's Strategic Plan. UPSHIFT provides a methodology for engaging youth and the private sector within UNICEF's programming, delivering

particularly against the Strategic Plan Goal 5 (adolescent engagement) and Goal 2 (adolescent skills). It also provides a methodology that can be used to design more effective programme responses towards adolescent results across the Strategic Plan and under the forthcoming Young People's Agenda. This broad range of benefits makes UPSHIFT attractive at the country level, as countries engage with UPSHIFT when they see clear value in terms of delivering against their country programme objectives. Within countries UPSHIFT can be led by different programme sections, highlighting its flexibility.

## Key milestones

- **2014** Kosovo launches UPSHIFT
- **2015** Montenegro and Viet Nam pilot UPSHIFT
- **Q3 2017** UPSHIFT becomes part of the GIC portfolio for scale up
- **Q4 2017** 22 countries gather to share learning and design UPSHIFT 2.0
- **Q1 2018** Official launch of youth empowerment programmes (including UPSHIFT) in Jordan and Lebanon



## WHAT USERS SAY



“We have contributed to changing the attitudes of society at large that Roma people can be productive members of society through meaningful participation.”

**Sejnur Veshall, UPSHIFT  
a social enterprise in Kosovo**  
(Sejnur pictured 2nd from right)

\*Reference to Kosovo is made in the context of UN Security Council Resolution 1244 (1999)





## Applying biosensors to diagnostics

As part of sourcing new ideas, the Director GIC participated in the inaugural Innovation Bridge 2015, an event in South Africa highlighting innovative solutions from academic institutions and the private sector. The GIC visited Rhodes University and among its various research activities, identified research from the Biotechnology Innovation Centre (RUBIC) as having high potential if developed in partnership for practical application.

Access to life-impacting and life-saving diagnostic tests in remote areas is constrained by their distance from clinics with centralized laboratory facilities and skilled technicians required to process and analyse tests. One of the biggest challenges in the deployment of low-cost and portable diagnostic technology is the access to biological materials (biomaterials) used in diagnostic devices that are capable of selectively recognizing a target marker. Many diagnostic tests use antibodies

as the biomaterials, but these are expensive to generate. They are also not very tolerant to changes in temperature and often cannot be stored for extended periods of time.

Recognizing that this is a barrier to the development of low-cost diagnostics, especially for their remote use, the multi-year GIC/RUBIC partnership focuses on producing new biomaterials, known as aptamers, which are highly accurate, low-cost, portable, shelf-stable and weather-resistant. Aptamers lock onto their targets with the same affinity as antibodies. Once the aptamer sequence has been identified in the laboratory, aptamers cost a fraction of the price of generating antibodies. The inclusion of aptamers into diagnostic tests should improve the affordability, transportability and storability of the resultant test strips, and most importantly, should increase the availability of these tests to marginalized children, women and communities.

## 2017 results

There are multiple areas of work within the partnership, all of which have moved steadily forward. One highlight in 2017 emerged from the MakerSpace, which was established at RUBIC in 2016, and to which the GIC contributed 3D-printing components.

Two graduate students in MakerSpace used the GIC/RUBIC 3D-print equipment to develop FieldLab, a suitcase-like, solar-powered lab-in-a-box that is “designed specifically to address the constraints facing medical diagnostics in Africa: affordability, mobility and robustness.” The portable lab’s 3D-printed equipment is able to test for viruses and bacteria, carry out DNA analysis, centrifugation and offer a visual analysis of the result. FieldLab won multiple science innovation awards in 2017 and has moved into production. The designs for FieldLab have been OpenSourced as a public good.

The development of new aptamers to replace antibodies in three specific areas remains on track, as well as the development of test-strip technology for these aptamers:

- Antenatal tests, which are taken for granted as part of routine care of pregnant women in industrialized countries, are not widely available for women of lesser economic means or living in remote areas. A new human chorionic gonadotropin (hCG) aptamer is under development that will determine pregnancy status, estimate gestational age during normal pregnancy, and identify high-risk pregnancies so that these pregnant women can be identified in advance of giving birth and referred for appropriate care.
- A new aptamer has been developed that detects CD4, a marker of HIV/AIDS severity, with application in monitoring treatment. Its therapeutic application is being determined.
- A new malaria aptamer (P. Vivax) has been developed, and work continues on an application that is capable of distinguishing between different strains of malaria so that, in areas where different malaria strains are present, the correct strain can be identified and appropriate treatment can be started.

Another open-source product, which should be completed in early 2019, is a colorimetric analysis application for mobile phones. This app is designed to read and interpret test results from diagnostic test strips, such as those used in common urine tests that change colour. Using the camera on a smart phone, this app will accurately analyse and interpret test results, and could provide or link to validated quality of care information and/or connect to real-time notification or monitoring systems.

## Pathways to scale

The FieldLab followed a rapid iteration and scale path into production. The publicity and recognition related to its awards helped propel this.

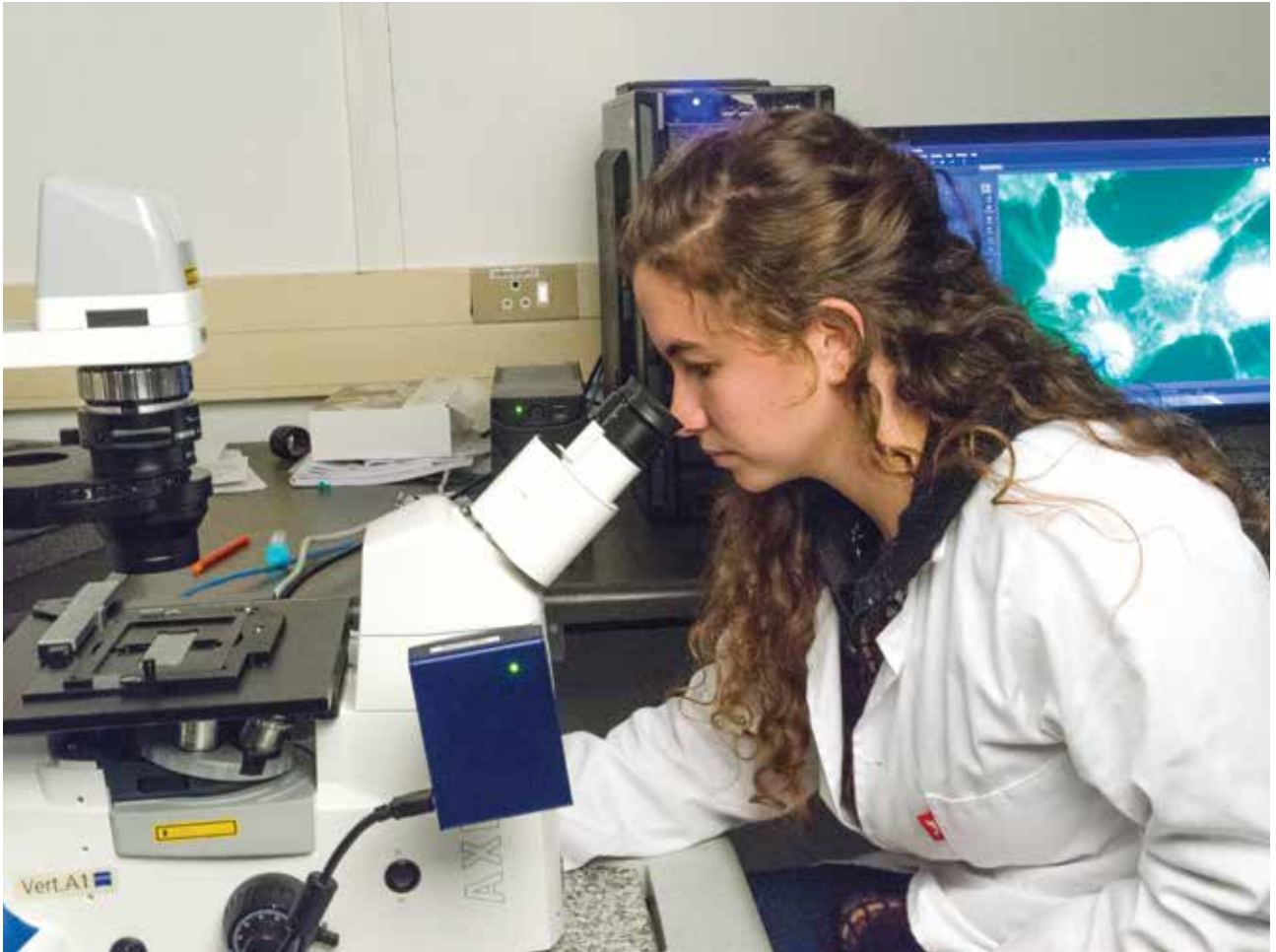
The colorimetric analysis application will be released in 2019 along with its source code, so that it can be widely adopted and adapted on a global basis.

GIC is working with life sciences experts to explore various pathways to scale the aptamers.

## Key milestones

- **2015** Innovation scoping mission to South Africa results in RUBIC’s research being identified.
- **2015** Partnership with RUBIC announced at GIC launch in May. RUBIC showcase research at the launch.
- **2016** Partnership with RUBIC is fully operationalized. UNICEF Innovation Fund funds the first year. Applied research work begins, and MakerSpace is established.
- **2017** FieldLab, a rugged lab-in-a-box, wins multiple science innovation awards and goes into production.





# Countries adopting and adapting innovations

## U-REPORT

- |                             |               |                      |                    |
|-----------------------------|---------------|----------------------|--------------------|
| 1. Brazil                   | 11. Ghana     | 22. Moldova          | 33. Swaziland      |
| 2. Burkina Faso             | 12. Guatemala | 23. Mozambique       | 34. Syria          |
| 3. Burundi                  | 13. Guinea    | 24. Myanmar          | 35. Tanzania       |
| 4. Cameroon                 | 14. India     | 25. Nepal            | 36. Thailand       |
| 5. Central African Republic | 15. Indonesia | 26. New Zealand      | 37. Tunisia        |
| 6. Chad                     | 16. Ireland   | 27. Nigeria          | 38. Uganda         |
| 7. Chile                    | 17. Liberia   | 28. Pakistan         | 39. United Kingdom |
| 8. Cote d'Ivoire            | 18. Malawi    | 29. Papua New Guinea | 40. Ukraine        |
| 9. El Salvador              | 19. Malaysia  | 30. Senegal          | 41. Zambia         |
| 10. France                  | 20. Mali      | 31. Sierra Leone     | 42. Zimbabwe       |
|                             | 21. Mexico    | 32. South Africa     |                    |

## Digital Health

- |                 |              |                      |              |
|-----------------|--------------|----------------------|--------------|
| 1. Burkina Faso | 6. Indonesia | 11. Nicaragua        | 16. Tanzania |
| 2. Burundi      | 7. Liberia   | 12. Papua New Guinea | 17. Uganda   |
| 3. Congo        | 8. Mali      | 13. Senegal          | 18. Zambia   |
| 4. Guinea       | 9. Mexico    | 14. Sierra Leone     |              |
| 5. India        | 10. Nepal    | 15. Somalia          |              |

## Internet of Good Things

- |                                      |                   |                      |                                    |
|--------------------------------------|-------------------|----------------------|------------------------------------|
| 1. Algeria                           | 16. El Salvador   | 32. Maldives         | 48. South Africa                   |
| 2. Angola                            | 17. Gabon         | 33. Mauritania       | 49. St. Kitts and Nevis            |
| 3. Bangladesh                        | 18. Ghana         | 34. Mexico           | 50. St. Lucia                      |
| 4. Barbados                          | 19. Grenada       | 35. Mongolia         | 51. St. Vincent and the Grenadines |
| 5. Benin                             | 20. Guatemala     | 36. Mozambique       | 52. Sudan                          |
| 6. Belarus                           | 21. Guinea        | 37. Myanmar          | 53. Suriname                       |
| 7. Cabo Verde                        | 22. Guinea-Bissau | 38. Niger            | 54. Tanzania                       |
| 8. Cambodia                          | 23. Honduras      | 39. Nigeria          | 55. Thailand                       |
| 9. Cameroon                          | 24. Indonesia     | 40. Pakistan         | 56. Timor-Leste                    |
| 10. Chad                             | 25. Iraq          | 41. Panama           | 57. Trinidad and Tobago            |
| 11. Colombia                         | 26. Jamaica       | 42. Papua New Guinea | 58. Turks and Caicos Islands       |
| 12. Congo                            | 27. Jordan        | 43. Peru             | 59. Vanuatu                        |
| 13. Côte d'Ivoire                    | 28. Kenya         | 44. Philippines      | 60. Zambia                         |
| 14. Democratic Republic of the Congo | 29. Liberia       | 45. Rwanda           |                                    |
| 15. Dominica                         | 30. Madagascar    | 46. Senegal          |                                    |
|                                      | 31. Malawi        | 47. Seychelles       |                                    |

## Real-time information

- |                             |               |                      |                    |
|-----------------------------|---------------|----------------------|--------------------|
| 1. Afghanistan              | 14. Fiji      | 28. Moldova          | 42. Somalia        |
| 2. Albania                  | 15. France    | 29. Montenegro       | 43. Swaziland      |
| 3. Brazil                   | 16. Ghana     | 30. Mozambique       | 44. Syria          |
| 4. Burkina Faso             | 17. Guatemala | 31. Myanmar          | 45. Tanzania       |
| 5. Burundi                  | 18. Guinea    | 32. Nepal            | 46. Thailand       |
| 6. Cambodia                 | 19. India     | 33. New Zealand      | 47. Tunisia        |
| 7. Cameroon                 | 20. Indonesia | 34. Nicaragua        | 48. Uganda         |
| 8. Central African Republic | 21. Ireland   | 35. Niger            | 49. United Kingdom |
| 9. Chad                     | 22. Kosovo    | 36. Nigeria          | 50. Ukraine        |
| 10. Chile                   | 23. Liberia   | 37. Pakistan         | 51. Yemen          |
| 11. DR Congo                | 24. Malawi    | 38. Papua New Guinea | 52. Zambia         |
| 12. Cote d'Ivoire           | 25. Malaysia  | 39. Senegal          | 53. Zimbabwe       |
| 13. El Salvador             | 26. Mali      | 40. Sierra Leone     |                    |
|                             | 27. Mexico    | 41. South Africa     |                    |
- 

## Human-Centred Design

- |              |             |            |              |
|--------------|-------------|------------|--------------|
| 1. Indonesia | 3. Malaysia | 5. Myanmar | 7. Nicaragua |
| 2. Malawi    | 4. Mexico   | 6. Nepal   | 8. Tanzania  |
- 

## UPSHIFT

- |           |            |               |               |
|-----------|------------|---------------|---------------|
| 1. Jordan | 3. Lebanon | 5. Montenegro | 7. Tajikistan |
| 2. Kosovo | 4. Moldova | 6. Myanmar    | 8. Viet Nam   |





# Enhancing South-South cooperation through innovation

South-South cooperation is collaboration involving two or more developing countries of the Global South, and includes the political, economic, social, cultural, environmental and technical domains. The development of the open-source communication platform RapidPro is a good if unusual example.

RapidPro allows users to easily design, pilot and scale services that connect directly with a mobile phone user, without the help of a software developer. It is used in 53 countries and was built and is maintained by a global community of contributors. Like all of UNICEF's innovation initiatives, the platform was developed in line with the organization's Innovation Principles. Four of the principles align especially well with an approach that nurtures South-South cooperation.

## Reuse, improve and use open source

By using, modifying and extending existing tools, platforms and frameworks when possible, the GIC is able to build on existing foundations and be a part of existing ecosystems, rather than duplicating

The idea of using mobile phone-enabled messaging to improve development programmes began in East Africa a decade ago in the text messaging solution, RapidSMS. One of its earliest applications was in Zambia to reduce the time between collecting blood samples for early infant diagnosis for HIV and the return of test results to the originating health facility.

Inspired by the potential, a Rwandan software engineering company built their own commercial SMS service that combined the advantages of RapidSMS, while addressing many of the limitations that UNICEF and partners experienced while deploying it in difficult operating environments. Recognizing the value of this solution, UNICEF acted to make it open source and further expanded the functions, launching RapidPro in 2014.

By developing the RapidPro software to be open source with the code made available in a public GitHub code repository and supported through developer communities, this process embodies UNICEF's commitment to Use Open Standards, Open Data, Open Source and Open Innovation.



## Build for sustainability

Utilizing and investing in local communities (and developers by default) and helping to catalyse their growth are key to building for sustainability. UNICEF has put in place global long-term agreement (LTA) contracts with 12 local companies to develop and expand functionality, and provide other services.

Support from UNICEF ensures an enduring foundation for developers and partners across the world to continue to work together to respond to the demand for new features and functionalities, and to direct the evolution of the tool as technology evolves.

UNICEF's GIC and ICTD convene RapidCon, a conference that brings together the community of technology vendors and developers to discuss the evolution of RapidPro's architecture. RapidCon provides a way to orient newcomers to this ecosystem and to identify the strengths, interests, and opportunities of contributors to engage with RapidPro and related products.

## Be collaborative

The expansion and roadmap for RapidPro is often determined through multi-country cooperation. Countries that have experience in applying RapidPro regularly host study visits by officials from various ministries and engage in knowledge exchanges with countries that are interested in using the platform.

This collaborative model encourages government partners to pool their needs and resources to further improve and tailor the open-source platform. For example, the GIC identified common needs between Uganda and South Africa for functions that eventually became the tool CasePro, a case/issue management dashboard for RapidPro. A single solution was designed to avoid duplication in their spending, and to meet not only their own needs, but also to allow for its use by the 49 other countries that use the platform. Once launched, CasePro was quickly adopted in Nigeria, Cote d'Ivoire, Pakistan and Indonesia, and has been activated by 23 countries.

RapidPro applications are continuously updated and shared with the community of users across the developing world as new challenges emerge. The programmers work together to tailor solutions and share new ideas with peers, government partners, the development community, and non-profit organizations.

The global community of coders and developers are in Brazil, Cambodia, Chile, Ecuador, Nigeria, South Africa and Uganda, as well as in Europe and the United States. This group shares ideas and creates solutions to fit developing country contexts, and have made more than 15,000 code contributions.

The RapidPro experience demonstrates how innovation and technology can contribute to South-South cooperation. What's more, the platform has now been adopted by countries in the Global North, including in France, Ireland, New Zealand and the United Kingdom.

*RapidPro was selected and highlighted at UNDP's annual Global South-South Development Expo, and included in UNICEF's 2018 Compendium on South-South Cooperation.*





## What does the future hold for GIC 2.0?

As we anticipate the future evolution of scaling innovation within UNICEF, it is clear that the Global Innovation Centre (GIC) will also evolve significantly to best meet the new and different needs and opportunities.

The catalytic impact of the GIC contributed significantly to developing UNICEF's capacity to adopt and adapt new technology and approaches over the past three-plus years. The ICT function has been transformed to support technology for programmes, and solutions in the GIC portfolio are being mainstreamed into programme areas across the humanitarian-development nexus.

The following are the areas where we can deliver unique and need-based value to UNICEF:

1. Exploring innovative financing options to address the resourcing gap between pilots and scale.
2. Continuing to be the convener of a unique blended governance interface that engages both the private and public sectors, academics and youth around innovation at scale.
3. Addressing the evidence gap of innovation pilots to deliver business cases for investing in ready-to-scale solutions.
4. Providing expertise on how to take new solutions to scale and evolving GIC talent profiles accordingly from product leaders to expert scaling practitioners.
5. Continuing to build approaches that can be replicated and organizational capacity to support the ability to adopt, adapt and scale new technology and approaches into the way we work, contributing to organizational agility and remaining fit for purpose.



We will focus on priorities that will evolve and change over time. Currently, these priorities are:

- Expanding organizational capacity to accelerate the adoption and adaptation of digital health solutions, as well as expanding on the functions and applications that are available.
- Reaching 100 million U-Reporters through new channels, partnerships and uses to strengthen youth empowerment and contribute to the UNICEF-led Agenda for Young People.
- Identifying new innovations for scaling, such as the application of machine learning and artificial intelligence for development programming, especially to exponentially increase the scale, speed, efficiency and personalization at which information can be gathered, shared, responded to and analysed.
- Continuing to contribute to UNICEF's key performance indicators to scale real-time monitoring systems using open-source technology from the current 51 countries to 110 countries by 2021.

### The missing middle

The resource gap between innovation pilots and scale is a key area of focus.

Ten years ago there was a lack of innovation in the development sector. Today, there is much

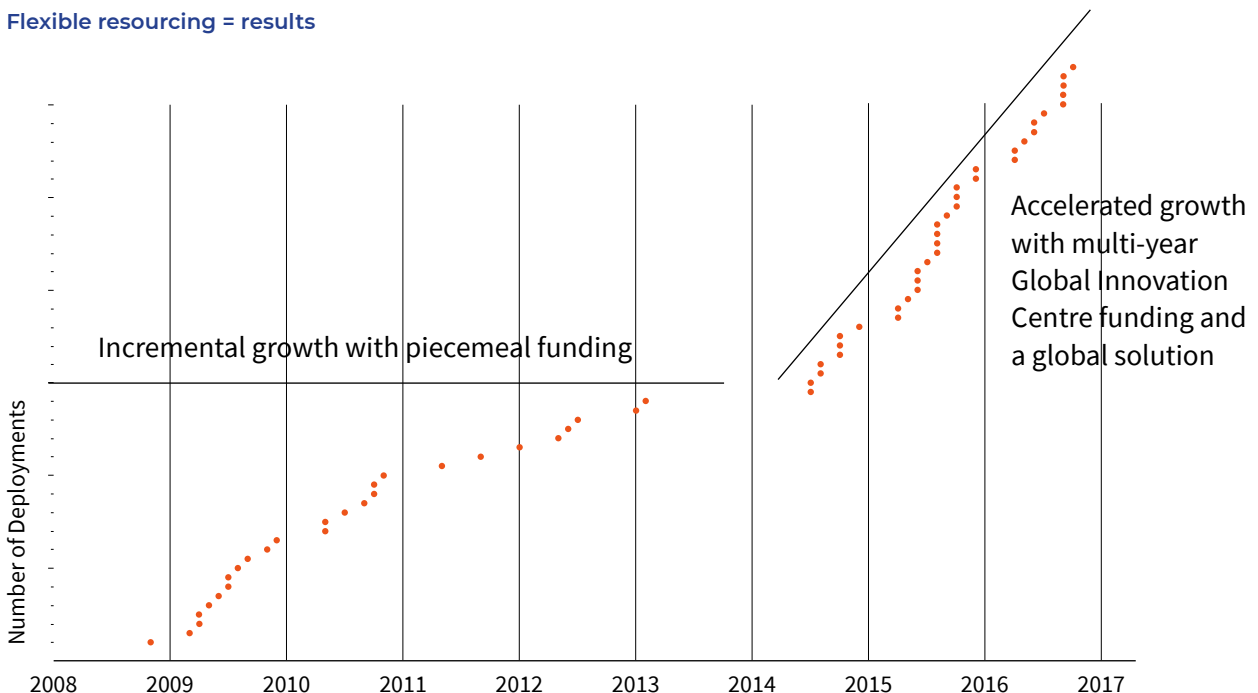
innovation activity and there are numerous sources of funding for early-stage innovation: the UNICEF Venture Fund, Humanitarian Innovation Fund, DFID Frontier Technology Livestreaming, USAID and Global Innovation Fund to name just a few. The challenge now is to ensure that promising, early-stage innovations are supported to scale their impact for millions of beneficiaries.

UNICEF is not alone in diagnosing this problem. The Bill & Melinda Gates Foundation calls this “... an innovation pile up at proof of concept.” Grand Challenges Canada notes that “...there is no easy or systematic path for the subset of innovations that should move forward to be able to access the attention and resources needed to achieve scale.” And analysis by BOND, the network for international development organizations, has shown that “... there is an unappreciated ‘missing middle’ in the innovation life cycle.”

Taking promising innovations to scale is complex, time consuming and resource intensive. Scaling for impact and sustainability requires flexible, multi-year funding. Short-term, piecemeal funding is inefficient and results in slower growth. UNICEF’s experience with scaling the real-time communication platform RapidPro demonstrates the relationship between piecemeal funding compared with flexible, multi-year funding (see Figure 1).

**Figure 1 RapidPro Platform funding 2008-2017**

**Flexible resourcing = results**



With this in mind, UNICEF has seeded US\$2 million into a new Accelerate to Scale funding mechanism, to be managed by the GIC. The purpose is to catalyse the adaptation and adoption of new solutions, to fill the gap between innovation pilots and products that are ready to scale, and to connect to financing options best suited to fund the scale needed to maximize the impact for beneficiaries.

## Accelerating to Scale

Accelerate to Scale does not aim to duplicate existing funds, within UNICEF or externally. The fund aims to bridge the gap between an innovation that has successfully been implemented in one context and sustainable implementation at scale in multiple regions around the world. Accelerate to Scale's purpose is to select new solutions for validation, to build the evidence required to support adoption among stakeholders, package and productize solutions recommended for scale with a clear and credible business case, and trigger collaborative exercises to identify financing mechanisms to fund scale (and potentially invest in these mechanisms).

Together with two Global Innovation Centre Advisory Committee members, UNICEF Canada and UNICEF USA, UNICEF's Office of Innovation convened the first of a series of design workshops on innovative financing approaches to solve the resourcing gap. This Friends of Accelerate to Scale

event drew together 30 experts representing the finance, investment, sustainability, grants, philanthropy, foundation and innovation sectors, along with representatives from the United Nations and UNICEF. It was hosted simultaneously in New York and Toronto.

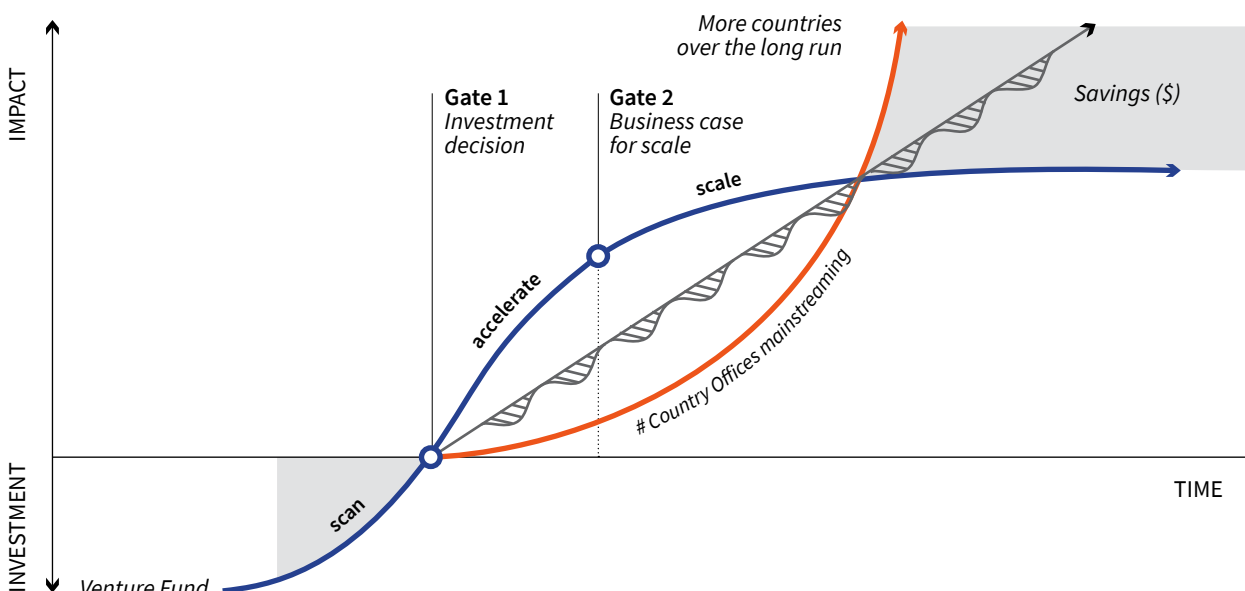
The participants examined the value proposition that upfront, flexible investment for scale delivers greater and more efficient impact over a shorter period of time (see Figure 2). A range of ideas were explored, and as a result, various actions are underway that point to future areas of the GIC's effort:

- Identifying opportunities to pilot blended finance/hybrid funding models that use seed funding from Accelerate to Scale to leverage grant, philanthropic and private capital.
- Creating business models that have revenue streams to fund operations so that it is not necessary to continuously raise funds.
- Exploring ways that products and solutions could be monetized.

Reflecting on the value that the workshops with the GIC Advisory Committee provided UNICEF, as well as the feedback on desiring more and earlier opportunities to consider innovative solutions, Accelerate to Scale aims to have more frequent engagements to collaborate on emerging ideas.

## Figure 2 Why invest to accelerate at scale?

Investment for scale = greater more efficient impact over shorter time







# The power of partnerships

We cannot achieve truly transformational change on our own. That is why we are committed to inspiring and engaging others who can help accelerate our mission of scaling technologies to transform children's lives. We collaborate with an interdisciplinary group of people working across industries, countries and cultures.

## Founding partners

Government of the Republic of Korea  
Philips Foundation  
UNICEF Canada  
UNICEF UK  
UNICEF USA

## Development partners and collaborators

Bill and Melinda Gates Foundation (BMGF)  
Centres for Disease Control (CDC)  
International Telecommunication Union (ITU)  
Joint United Nations Programme on HIV/AIDS (UNAIDS)  
United Nations Development Programme (UNDP)  
United Nations Population Fund (UNFPA)  
United Nations High Commissioner for Refugees (UNHCR)  
United Nations Volunteers (UNV)  
World Health Organization (WHO)  
World Food Programme (WFP)

## Private sector

ARM  
Facebook  
GE Foundation  
Johnson & Johnson  
Pfizer Foundation  
Telenor  
Viber

## Civil society

Honeybee Network, India  
World Organization of the Scout Movement  
World Association of Girl Guides and Girl Scouts

## Academia

Rhodes University, South Africa  
Tsinghua University, China

# Our team

“If you want to go quickly, go alone.  
If you want to go far, go together.”

*Proverb*

Many talented practitioners have worked with the Global Innovation Centre since its inception, part of a lean and agile team that has continuously evolved in profile, location and size as determined by programmatic needs and prioritization, pathway and business model for scaling, and resourcing.

Afrika Mukaneto  
Alexandra Tyers  
Alissa Collins  
Alix Cabral  
Angela Irving  
Angelica Ong  
Ariam Mogos  
Christopher Brooks  
Chris Szymczak  
Cornelius (Prince) Gregorio  
Cynthia McCaffrey  
Elliot McBride  
Emma Ohana  
Evan Wheeler  
Fatou Wurie  
Gena Cuba  
Guillaume Michels  
Hira Hafeez ur Rehman  
Huw Owen  
Issmail Nnafie  
James Powell  
Kalee McFadden  
Katherine Crisp  
Kenneth Paul Matovu  
Kidus Asfaw  
Kirsten Armstrong  
Kenneth Matovu Maria  
Luisa Sotomayor  
Marion McNabb  
Mari Nakano Muguya  
Ivan Wandira

Nathalie Goossens  
Olga Kayima  
Olobo Benson  
Raquel Wexler  
Richard Stanley  
Sharad Sapra  
Simon Nazer  
Stefan Bock  
Stuart Campo  
Sunita Grote  
Tanya Accone  
Tanya Bhandari  
Terra Weikel  
Tracy Phan  
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