UN Global Pulse is funded entirely through voluntary contributions from UN Member States, foundations and private sector entities. For innovation and transformation to thrive it needs investment - particularly in people. Funding positions and personnel isn’t as exciting as transformative technologies, but not doing so risks transformation being limited to rhetoric, hubris, and unused technologies and tools only. A sincere thank you to the donors - and people - who invested in our team.
WHAT OUR PARTNERS SAY ABOUT US

“UNGP Jakarta is known for cutting edge research, expertise and credibility of the team. We also have a history of great collaboration.”
Ryce Chanchai
Gender and Governance Specialist
UN Women Indonesia

“Working with UNGP Jakarta has been great. Their technical expertise and patience working with a rather complex bureaucratic hurdle helped us find reassurance on the pathways we choose to take in the programme.”
Biondi Sanda Sima
Head of Implementation
Jabar Digital Service

“UNGP Jakarta is a great initiative. Very ‘non-UN’ in that it’s agile, innovative, forward looking and responding to country needs. It has helped with making better decisions by inspiring others about what to do and how to do it outside of the rigid ‘UN programmatic approaches’ to capacity building.”
Gemma Van Halderen,
Director
Statistics Division
UNESCAP

“We can always rely on UNGP to provide impeccable research. The social media monitoring they generated have helped AIRA prioritize the countries to work in after detecting the volume and reach of misinformation.”
AbdelHalim AbdAllah
Africa InfoDemResponse Alliance Coordinator
WHO Regional Office for Africa

“The tool developed by UNGP made our annual data collection process much faster. It also encouraged us to further think how to make better use of digital tools in data collection and analysis.”
Vilma Kyroenen
Associate Political Affairs Officer
UN DPPA

“Our work with UNGP is setting standards and methods that will make analytics more actionable in health. They’re excellent professionals and colleagues.”
Tina Purnat
Technical Officer
WHO

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A very long year.

The year 2020 was many things. UN Global Pulse (UNGPs), along with the rest of the world found itself in an entirely predictable (and predicted) context. It was a year of asymmetries and competing logics. Offices, rather than being spaces for work, for creativity, and togetherness, became spaces of threat, of risk. Work and personal lives blurred, with our homes becoming makeshift offices and meeting rooms instead of intimate personal spaces. Reading a room became watching people through a virtual background and the constant fight with the unmute button.

Whilst we were adapting to a life at home, millions of the most vulnerable of our world were adapting to increased inequalities, to a stark lack of social security, to increased poverty and to death. It is in this context that we were asked by the UN Secretary-General’s office to assemble a team that could help the UN make sense of a rapidly changing world in all its complexity. This team needed to work out how technologies, partnerships, new streams of data and information, and innovation, could create new insights to fuel sensemaking and decision making.

The good news is that there were a lot of successes. The Global Pulse team, and its partners. Because we were not necessarily set up for crisis response, we created the Crisis Insights Team to test new approaches and ourselves and the way we worked. The year 2020 required us to simultaneously manage change in a pandemic and to respond to the needs emerging from the pandemic. It also made us realize that change needs to be a constant in our now normal. Among the many things we learned in 2020, some are worth including here. We learned that we lacked experience in working in crises settings, our instincts and reactions were not well-honed in terms of the cadence of demands or context. We lacked structures and the right kind of fluidity. Our back end processes, including operational support, were hugely under resourced and underappreciated. This meant that getting new team members on board, or new funding streams, partnerships, or procuring tools was incredibly difficult and time consuming.

And whilst we learned the above and we adapted, we also learned that investing in teams rather than gadgets is an important – an essential – part of transformation and reform. Critical un earmarked funds allowed us to adapt quickly and to provide security during global upheaval. Time and time again we learned the value of true innovation which requires investment in understanding challenges and problems before producing solutions. We also learned about mental health. Our team worked on models that predicted the numbers of deaths from the COVID-19 disease. For some, this will have a profound effect on their worldview moving forwards. Many of us dealt with home-schooling, becoming teachers and educators, or becoming our own personal trainers. Some of us had to self isolate for months on end and to be alone, perhaps at times unhealthily finding solace only in work. We learned that as managers, our role must also deepen in understanding and empathy.

Building on the above and much more, we also learned that we wanted a different future for UNGP. This future refocuses our work but also our culture. We’re going to build on the last ten years of experimentation and engagement, and we’re going to broaden our work to include Futures and Foresight so we can better anticipate and hopefully influence the future of our world. We’re going to do more innovation that reaches beyond AI and data, so that we can contribute to an even more agile United Nations. We’re going to investigate how we can pivot towards Behavioural Science, and contribute to the ongoing digital transformation of the UN. We will innovate our operational backbone so that we can establish strong partnerships quicker. We will streamline our administration to have resources flow freely through our network to create better conditions for the network of humans to thrive.

The best news is that some of this good work has already started. Our newest team joined our network from Helsinki in 2020 and they’re already shaping what futures and foresight could look like. In Kampala the team has been fusing behavioural science and human centered design towards improving financial inclusion in Indonesia. And in New York, the team is using digital technologies to understand the effects of COVID-19 on peacekeeping operations. In Jakarta the team has been fusing behavioural science and human centered design towards improving social distancing. We’re going to work tirelessly with the Executive Office of the Secretary-General to tackle operational challenges, and alignment with overarching priorities.

If 2020 taught us one thing, it is that change is never easy, but always possible.
We helped bring together experts from WHO, UNHCR, OCHA, Durham University and IBM/MIT AI Lab to apply epidemic modelling against COVID-19 in the Cox’s Bazar settlement. Results helped inform decision making on the ground.

Part of data innovation is about finding new uses for official data that was collected for other purposes. That was the case for our work in Jakarta to identify areas at risk for COVID-19 based on their transmission risk and transmission potential.

We successfully tested the technology we developed to extract, transcribe, and analyse public radio discussions to unearth insights about COVID-19 in Uganda, where statistical data and other online data sources are scarce.

We worked with UNHCR and applied machine learning and econometric forecasting methods to estimate the number of displaced persons who would enter Brazil from Venezuela and their need for humanitarian aid.

We accomplished those objectives through a network of innovation labs which are made up of multidisciplinary teams of data scientists, engineers, designers, social scientists, communication experts, and data privacy and legal specialists who work together with development and humanitarian practitioners to test, refine, and scale digital innovation.
UN Global Pulse New York, also referred to as Pulse Lab New York, established in 2009, serves as the headquarters of UN Global Pulse and is the thought-leadership and knowledge sharing hub for the network. The Lab works closely with UN agencies and government counterparts to get a better understanding of the policy and implementation issues they are grappling with and to explore how new data sources can provide useful insights that support decision makers.

UN Global Pulse Kampala, also referred to as Pulse Lab Kampala, opened its doors in 2014 as the first innovation office in Africa working to develop digital data-driven applications to support UN Programmes on the ground. The Lab has pioneered work on speech-to-text transcription for vernacular African languages to extract insights from public radio discourse to support sustainable development. Over the years, it gained a regional dimension working with UN Country Teams in Somalia, Zimbabwe, Ghana, Kenya, Senegal and recently Mali.

UN Global Pulse Jakarta, also referred to as Pulse Lab Jakarta, was set up in 2012 as a joint data innovation facility of the United Nations (through UN Global Pulse) and the Government of Indonesia (via the Ministry of National Development Planning). Functioning as an analytic partnerships accelerator, the Lab operates in the problem, solution and identity spaces where it applies mixed-methods research approaches. The Lab’s mandate focuses on catalysing connections across the UN, governments, the private and development sectors, as well as civil society to support policies and action for effective development and humanitarian practice.

A new Lab joined our network in 2020! UN Global Pulse Finland is made up of experts spanning the fields of innovation, transformational and change management, communications, sustainable development and humanitarian response. The Lab engages with a variety of partners to develop, co-create, and promote technology and innovation solutions which accelerate progress on achieving the SDGs. This includes cross-sector collaborations with government ministries, NGOs, development banks, academia, and the private sector.

Due to its wide range of experiences, knowledge, and skill sets, the Lab is an ideal addition to the UN Global Pulse network. Its focus areas will be on:

- Building Futures and Foresight capabilities which will enhance the work of the UNGP network. This is in part a response to the question: How can we make the UN more agile and responsive to better address needs and new challenges, for example, preparing for and mitigating health emergencies and disasters?
- Promoting system wide change in scaling innovation for sustained and improved humanitarian, peace and development outcomes.
- Becoming an operational hub for experts, technical support, learning and building capacity for our development partners.

The Lab aligns with the UN Secretary-General’s priorities and with Finnish Development policy objectives such as gender equality, human rights, and climate change. It will use innovation and technology to help achieve the SDGs and other pressing global priorities. This means drawing on and sharing lessons, expertise and know-how from a much wider development community. Our hope is that this approach will create a better quality of global digital public goods which will benefit more people, communities, and systems.

A warm welcome to our new Lab in Finland!
UN Global Pulse labs are helping UN teams, governments, and external partners close the gap between development and humanitarian priorities and the current pace of change that requires faster, better, and more streamlined solutions. We do this through research and development (R&D), human-centred design, policy development for responsible use of data, and scaling of proven approaches. Our work is guided by our collaborations, partnerships, knowledge exchange, and communications.

OUR METHODOLOGICAL IMPACT
covers the effects that we have on the practice and application of data science, data protection and privacy, and ethical AI. Under this definition, we research applications of big data and artificial intelligence and integrate new analytical methods into workflows to address existing and emerging challenges. We support development of instruments, partnerships, and mechanisms to strengthen privacy and data protection while encouraging an ethical approach to data and AI across sectors.

OUR OPERATIONAL IMPACT
accelerates UN-wide uptake of policies, software platforms, methods, approaches, and algorithms we have developed over the years or which have been identified to achieve measurable impacts. For instance, improvements in operational effectiveness and/or efficiency due to the adoption or adaption of UN Global Pulse tools, or due to an increased understanding of policies are considered here.

OUR ECOSYSTEMIC IMPACT
is extremely important given our mandate to support digital innovation more broadly. We are conscious that we exist as part of a much more complex innovation ecosystem. Contributing different approaches to this ecosystem, for example in terms of new collaborations, partnerships, or futures and foresight, we support transformational changes envisaged by the Secretary-General for a faster and more effective United Nations.

WE MULTIPLY IMPACT BY TAILORING OUR SERVICES
As an EXECUTOR, UN Global Pulse implements projects together with UN and other partners, contributing subject matter expertise, and helping develop projects from proof of concept to operationalization.

As a FACILITATOR, UN Global Pulse focuses on project facilitation and acts as a bridge connecting private and public sector entities.

As a TECHNICAL ADVISOR, UN Global Pulse provides highly-specialized expertise as well as advisory and technical guidance on various specific initiatives.

WE BRING PARTNERS TOGETHER
A decade ago, UN Global Pulse spurred the data philanthropy movement, which has transformed into a call to action by many governments and private sector actors for using data as a public good.

Our partnerships with corporations are based around access to data, access to technology, access to expertise, or in some instances, all three.

Increasingly, UN Global Pulse has been developing the mechanisms for creating UN System-wide partnerships that UN entities and offices can benefit from.

Our partnerships with academia are focused on joint research, and have been very successful both in terms of discovering and explaining various aspects of data and AI, and in shortening the path from research to operational use.

WE CREATE AN ENABLING ENVIRONMENT FOR INNOVATION
The work of UN Global Pulse is generating surprising findings, which make us constantly revisit and reimagine how we do things. At the core of our work is sharing our successes, failures and lessons learned with the wider innovation community. We do this by hosting, participating in, and presenting in workshops and events from the highest-level convenings to ad-hoc sessions with the innovation community. In addition to lending subject matter expertise, we advise on creating job profiles to find the people with the right skills and share our processes and guidelines with the wider UN System to create new ways of working and bring about greater opportunity to advance collective action on our common priorities.

In 2020, as our collective modus operandi was forced to change due to COVID-19, we found new ways to connect with the community of practice, leveraging online conferencing platforms and tools. In the pages that follow here, we’ve provided a snapshot of our activities, outlining their impact and their alignment with our key functions.
In this review, we conducted an overview of studies using Machine Learning and, more broadly, Artificial Intelligence, to tackle aspects of COVID-19 as the pandemic began to spread. We identified applications that address challenges posed by COVID-19 at different scales, including: molecular, by identifying new or existing drugs for treatment; clinical, by supporting diagnosis and evaluating prognosis based on medical imaging and non-invasive measures; and societal, by tracking both the epidemic and the accompanying infodemic using multiple data sources.

We also conducted a review of datasets, tools, and resources needed to facilitate AI research, and discussed strategic considerations related to the operational implementation of multidisciplinary partnerships and open science. Given the rapid progression of infections, real-time short-term forecasting can be a vital source of information both for medical professionals and public policy decision makers. Our research highlighted that models in particular, must be flexible in order to adapt to changing protocols and procedures.

An important aspect of successfully using new technologies in the fight against this and future pandemics is international cooperation. Few of the systems we reviewed in our research had at the time of review the operational maturity needed to combat the virus. However, they had moved the needle in the right direction with an abundance of useful information to drive progress. Ours was the first comprehensive mapping of AI applications against COVID-19 and has been referenced in over 100 publications since it was published.

In an unprecedented effort of scientific collaboration, researchers across fields raced in 2020 to support the response to COVID-19. Members of our data science team in New York together with others at ITU, Mila-Quebec AI Institute, UNESCO, and WHO proposed a framework to categorize multidisciplinary AI research against COVID-19 on three scales: molecular, clinical, and societal (epidemiology and infodemics).

Their review revealed interesting findings. First, the hyper-fragmentation of data-sharing efforts is a challenge and might result in advances that are restricted to particular projects and local communities. Open science can accelerate knowledge dissemination and capacity building of national health systems, supported by multi-stakeholder AI partnerships operating across international borders.

Second, one of the challenges of making a greater impact with AI applications is not knowing where to start and how efforts can be most effective. There is a need for greater cooperation between practitioners and the AI community. The AI community already is, and should continue to seek advice and guidance from domain experts, including government officials, healthcare professionals and first responders. In addition, to effectively combat the infodemic that has been spreading alongside the virus, the international community must share and amplify good practices, identify priorities, facilitate partnerships, and provide advice and technical assistance to governments and relevant national stakeholders to foster international cooperation.

Third, any AI application that could be used in the fight against COVID-19 ought to undergo an assessment to ensure that it complies with ethical principles and, above all, respects human rights. Stakeholders should ensure that principles, including those of openness and accessibility, are at the heart of AI-enabled solutions.
Ships are an important means of transportation for both people and goods, which also makes them potential hotspots for diseases, especially those with a longer incubation period. Based on research we previously conducted with vessel tracking data, we already knew that Automatic Identification System (AIS) data is a valuable source of information. When modelling the spread of diseases in port cities, complementing insights from flight data, especially arrival times in future ports in near real-time. This AIS data is a valuable source of information.

AIS data forms a global database of maritime traffic. Most large commercial, international, and passenger ships must be equipped with an AIS transmitter, which reports dynamic details about the ship’s position – such as its location, speed, and course over ground – and static details, including a ship’s identifier, type, and flag. This information is routinely used to monitor port security and detect fishing behaviour.

We researched how AIS traffic data can inform epidemic modelling using two case studies. The first looked at the plague outbreak that hit Madagascar in 2017, affecting an estimated 2,348 individuals and resulting in 202 deaths. The second study analysed COVID-19 infections on cruise ships like the Diamond Princess. Our methodology consisted of gathering information from ports and ships and constructing an origin-destination matrix.

We learned that we can use AIS data to visualize individual ship trajectories to understand, for example, whether ships came to shore in cities with high risk of infections and to account for their arrival times in future ports in near real-time. This type of information could be useful in complementing insights from flight data, especially when modelling the spread of diseases in port cities and island nations.

As part of the UN COVID-19 Response and Recovery Multi-Partner Trust Fund (COVID-19 MPTF), UN Women partnered with UNGP Jakarta and Gojek Indonesia for a mixed-methods research to understand the extent to which COVID-19 has affected women entrepreneurs and women-owned MSBs in Indonesia. The focus of the research was on the food and beverage sectors. With evidence suggesting that women who own and run MSBs are relying more on digital platforms to market their products and services, further understanding this phenomenon is critical for designing responsive programmes and addressing gender inequalities that have been exacerbated by the pandemic.

The research resulted in two main outputs, delivered jointly by our team and UN Women:

**Leveraging Digitalization to Help Women Entrepreneurs Cope with the Effects of COVID-19**

1. **Leveraging Digitalization to Cope with COVID-19: An Indonesian Case Study on Women-Owned Micro and Small Businesses**, a research report which consists of findings from the UN Women-led qualitative research as well as both agencies’ policy recommendations. bit.ly/MSBsDig

Is Digitization Helping Businesses Like Yours to Cope with the Effects of COVID-19?: an interactive data visualization portal that features data from the survey conducted by UN Women and Gojek, as well as selected insights from the qualitative research. bit.ly/C19biz

Our team delivered the research design for the qualitative component, which was peer-reviewed by UN Women Statistics Division and Gojek Indonesia. In addition, the team developed a set of research instruments for the qualitative component, consisting of guidelines for virtual interviews and digital observation that features data from the survey conducted by UN Women and Gojek, as well as selected insights from the qualitative research.

To build on the existing work, UN Women Statistics Division is planning to replicate the survey in other countries in the Asia-Pacific region, using the current research as a case study.

In the early weeks of COVID-19 in Indonesia, UNGP Jakarta began surveying the availability of publicly reported data on cases across the country. Apart from understanding how the pandemic was evolving across the archipelago, we were interested in examining the country-wide data ecosystem. Our baseline assessment in May 2020 revealed that only 26 of the country’s 34 provinces had clear reporting sites where data could be obtained, and of the 523 districts, only 290 had updated websites reporting on COVID-19.

Whilst several provinces share their data on public sites through a common domain-naming format (https://corona.provincename.go.id), others provide data through their regional health offices or use customised links. West Java in particular is one of the provinces that has complete and updated data, with DKI Jakarta detailing data from the district to the village (kelurahan) level. However, this is far from being the norm across all provinces, notably with data being publicly unavailable for a few. Ranging from PDFs to images, there are also inconsistencies in the format in which the data is presented, thus presenting challenges for other parties to aggregate and/or make use of the data.

In undertaking this process, it became immediately apparent the need for more effective country-wide collaboration and a stronger data ecosystem. Together with the Data and Information Centre (Pusdatinrenbang) in the Ministry of National Development Planning, our team designed a data analysis and visualisation dashboard to monitor how the data was being reported day-to-day on provincial websites. Particularly in handling the COVID-19 crisis, this was an opportunity to identify and address underlying, systemic conditions within the country-wide data ecosystem to ensure a more effective national response, and tackle misinformation where trust in public data is compromised.

In the second phase of our baseline assessment, we further examined the provincial websites’ public reporting on COVID-19 to answer: what details are included on each website, how frequently is it updated, and what are the recurring issues in terms of data access and data ingestion? This dashboard is being integrated among the Indonesian Government’s COVID-19 monitoring assessment tools.
In settlements for refugees and internally-displaced persons (IDPs), which often suffer from overcrowding, insufficient sanitation, and particularly rapid disease spread, COVID-19 presents a significant threat as will any future epidemics or other health crises.

In an unprecedented collaboration, our team at UNGP New York worked with health professionals from WHO, and experts at UNHCR, OCHA, Durham University and IBM/MIT AI lab to model the impact of public health interventions in the Cox’s Bazar settlement in Bangladesh. To do so, the team developed an agent-based modelling approach informed by data on geography, demographics, comorbidities and other parameters obtained from real world observations.

They designed a three-step process. First, they created a ‘digital twin’ of the settlement, including the locations where people usually interact like gathering spots or water pumps. Second, they simulated the movement of individuals and their daily routine. Third, they modelled the effects of different public health interventions against COVID-19. One scenario the team modelled investigated the spread of the disease depending on the number of people wearing masks and the efficacy of the masks worn. Another scenario looked at the effects of different healthcare delivery mechanisms like home-care versus hospitalization. One final scenario modelled different mitigation measures against the spread of COVID-19 once learning centres reopened—these were closed at the beginning of the pandemic and are indoor spaces where the virus can propagate fast.

Results were shared with public health officials working in the settlements through a series of reports that were used to inform decision making and have been used as a shared reference point between other UN entities and NGOs operating in Bangladesh, including the Inter Sector Coordination Group. Based on the success of this project, we are working with UNHCR to adapt this approach to contexts in Somalia.

### Responding to the COVID-19 Infodemic with Social Media Monitoring

Radio remains one of the most reliable and affordable mediums of accessing and sharing information and an untapped resource for analysis. It includes first-hand accounts of incidents reported by citizens that are not recorded elsewhere. It also includes opinions about the COVID-19 crisis that are not biased by questions framed by researchers and that reveal personal views not biased by fear of judgement.

Over the past five years, our teams in UNGP New York and Kampala have been developing speech-to-text technology for vernacular languages that allows us to automatically transcribe and filter what people say on the radio to identify relevant issues for sustainable development and humanitarian challenges. Based on this technology, we set out to test if we can unearth insights about COVID-19 topics.

We selected the Central Region of Uganda as a case study from where we extracted some 100 transcripts containing COVID-19 keywords over a period of one week in April. While the scope of our initial research was small, it proved that the analysis of public radio discourse can support authorities and international organizations in responding to the pandemic in three main areas: health care system monitoring and outbreak detection; managing the infodemic; and the social and economic impact of the crisis. Here are just some examples of topics that were picked up through radio analysis.

…”Some members of the health officials were running away from the patients because they had no protective gear. Mr. He also said that XXX Cultural leaders should stop confusing the masses that Corona is an Evil Spirit. You see even Pastor XXX was arrested for telling people that the virus does not exist…”

…”If people had followed what I had told them they would not be regretting. I said Garlic, Etenantu, Eminuuma and eating boiled foods fight Coronavirus…”

…”What are some of the effects of the Government directive? LOC: …one of the effects of the Coronavirus was increasing prices of products like the salt.”

Falsehoods, which can range from deliberate lies to genuine confusion and errors, often travel alongside novel threats like COVID-19. This abundance of misinformation makes it hard for decision-makers, healthcare workers, and the general public to distill trustworthy and reliable guidance, increases feelings of anxiety and confusion, and can affect decision-making processes with immediate effects because of a lack of time to conduct quality control.

Our team in UNGP New York provided analytics support to the WHO Regional Office for Africa by mining online data sources including Twitter, news, websites, Youtube and selected forums. Based on the real-time flow of information that we provided, WHO developed recommendations and solutions for timely course correction of communications and for better targeted engagement strategies. Building on this initial work, our two teams will embark on a year-long project to expand the scope of the analysis and include radio as an additional source of information that would assure that voices of populations not included in the discourse are accounted for.

UNGP also became an active member of the Africa Infodemic Response Alliance (AIRA), the first initiative of its kind that brings together international and regional organizations and fact-checking groups with expertise in data and behavioural science, epidemiology, research, digital health, and communications to detect, disrupt and counter damaging misinformation on public health issues in Africa. Our involvement includes both developing analytics and policy guidelines, as well as providing continuous advisory and technical guidance for specific initiatives.
A NEW LINE OF WORK FOCUSED ON FUTURES & FORESIGHT

While COVID-19 has thrown the world into havoc, it also presented an unforeseen opportunity to transform the ways we work to change the future. This is our momentum to accelerate positives and to anticipate emerging threats, plan for more uncertainties and take preventive action to build a better, more equal, and inclusive world. The UN Secretary-General has placed great emphasis and investment in being able to transform the UN into an organisation that can do all of the above, and much, much more.

This means shifting from single-point and mandate-driven innovation to creating value and innovating with and within global networks and driving deep connections with the broader ecosystem of UN and non-UN stakeholders. To help these transformation efforts we recently added futures and foresight as a new stream of work in our portfolio.

What does that look like?

First, we’re adding to elements that already exist by supporting the Secretary-General’s strategic priorities through a system-wide approach to futures and foresight, working together with groups like the UN Network for Strategic Futures and Foresight to contribute to assets and tools. In addition, we’ll be bringing new foresight expertise into UN Global Pulse to target the SG’s priorities by building capacity in his own office. This work includes operationalizing strategies like the Data Strategy and Innovation Agenda, providing new frameworks, models and standards to work as one, and including practical issues like sharing data across silos for better outputs.

Second, we’re going to build foresight capacities through a needs-based service offering. A service to UN System and beyond. To do this, we can play to our existing strengths and use new technologies such as ML and other AI tools to modernize the foresight practice. We will explore new ways to help us make sense of the world, sharing what we learned and asking questions to understand what the disruptive changes mean to each mandate.

We will also work to help build capacities in terms of methodologies and processes. This will involve building awareness and educational approaches that help decision makers, managers, and others know when and how to use this service for maximum value, like in resource allocation exercises or policy formation. We’ll do this through simple steps, like making people aware of what futures and foresight is, or by making sure that insights and sensemaking carried out in one part of the UN are shared with other parts.

Third, we’re going to test what works and what doesn’t. We plan to practice what we preach and use innovation processes and methodologies to experiment: against testable hypotheses, challenging our own (and others’) assumptions around the most useful approaches. We will share learnings of mistakes as well as successes, and where we create insights and sensemaking we will share outputs and products with the broader system across silos.

Finally, futures and foresight efforts need to be grounded in inclusion, diversity, and ethical practices. We will therefore drive the use of best practices in the uses of futures and foresight, making sure that awareness and capabilities in ethical practices are used widely. We will ensure that frameworks, policies and guidelines have data accountability and interoperability across the system. Where we do carry out exercises in sensemaking or in the design of data gathering exercises we will use diversity and inclusion as guides and tools to help us create the best insights possible and improve diversity and transparency at each step of the insight value chain.

It’s a large piece of work and there is a lot we don’t know, but it’s also an exciting and meaningful addition to our portfolio and one we think will drive transformation across our United Nations. So we’re pretty excited about it and ready to start learning.
Be lawful, limited in scope and time, and necessary and proportionate to specified and legitimate purposes in response to the pandemic; Ensure appropriate confidentiality, security, time-bound retention and proper destruction or deletion of data in accordance with the aforementioned purposes; Ensure that any data exchange adheres to applicable international law, data protection and privacy principles, and is evaluated based on proper due diligence and risks assessments; Be subject to any applicable mechanisms and procedures to ensure that measures taken with regard to data use are justified by and in accordance with the aforementioned principles and purposes, and cease as soon as the need for such measures is no longer present; and Be transparent in order to build trust in the deployment of current and future efforts alike.

In 2020, we worked through the UN Privacy Policy Group, which we co-chair, to develop a Joint Statement on Data Protection and Privacy in the COVID-19 Response to support the privacy protective use of data and technology whilst enabling an effective and efficient response in fighting the pandemic. The Statement reinforces that collection, use and processing of data should:

- Be lawful, limited in scope and time, and necessary and proportionate to specified and legitimate purposes in response to the pandemic;
- Ensure appropriate confidentiality, security, time-bound retention and proper destruction or deletion of data in accordance with the aforementioned purposes;
- Ensure that any data exchange adheres to applicable international law, data protection and privacy principles, and is evaluated based on proper due diligence and risks assessments;
- Be subject to any applicable mechanisms and procedures to ensure that measures taken with regard to data use are justified by and in accordance with the aforementioned principles and purposes, and cease as soon as the need for such measures is no longer present; and
- Be transparent in order to build trust in the deployment of current and future efforts alike.

The Statement was endorsed by the UN entities including IOM, ITU, OCHA, OHCHR, UNDP, UNEP, UNESCO, UNHCR, UNICEF, UNOPS, UPU, UN Volunteers, UN Women, WFP and WHO.

In 2020 we developed and published the Level 2 of our Risk Assessment Tool that elaborates on the risks and harms of data use and data non-use in humanitarian contexts. Building on Level 1, this tool is designed to measure in detail the likelihood, magnitude and severity of potential harms.

The tool prompts users to thoroughly analyze and scrutinize the data privacy and data protection implications of a project at all stages from planning to execution. This promotes awareness, training, privacy by design, mitigation measures, and documents the thinking throughout the project. The aim of our Risk, Harms and Benefits Assessment is to facilitate creativity, capability, and possibility by demonstrating conscientiousness and documenting the high level data privacy and protection considerations.

Additionally, we continued to develop and test an online version of the tool, which we plan to release in 2021. Organizations including WHO, UNHCR, OCHA, IOM, UNICEF and ICRC have drawn on the tool’s concepts of risks and harms and data sensitivity levels to make systemic changes in how they make policy decisions.

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In 2020 we developed and published the Level 2 of our Risk Assessment Tool that elaborates on the risks and harms of data use and data non-use in humanitarian contexts. Building on Level 1, this tool is designed to measure in detail the likelihood, magnitude and significance of the positive impacts of a data innovation project against the likelihood of the risks and the likelihood, magnitude and severity of potential harms.

The tool prompts users to thoroughly analyze and scrutinize the data privacy and data protection implications of a project at all stages from planning to execution. This promotes awareness, training, privacy by design, mitigation measures, and documents the thinking throughout the project. The aim of our Risk, Harms and Benefits Assessment is to facilitate creativity, capability, and possibility by demonstrating conscientiousness and documenting the high level data privacy and protection considerations.

Additionally, we continued to develop and test an online version of the tool, which we plan to release in 2021. Organizations including WHO, UNHCR, OCHA, IOM, UNICEF and ICRC have drawn on the tool’s concepts of risks and harms and data sensitivity levels to make systemic changes in how they make policy decisions.

In 2020, we worked through the UN Privacy Policy Group, which we co-chair, to develop a Joint Statement on Data Protection and Privacy in the COVID-19 Response to support the privacy protective use of data and technology whilst enabling an effective and efficient response in fighting the pandemic. The Statement reinforces that collection, use and processing of data should:

- Be lawful, limited in scope and time, and necessary and proportionate to specified and legitimate purposes in response to the pandemic;
- Ensure appropriate confidentiality, security, time-bound retention and proper destruction or deletion of data in accordance with the aforementioned purposes;
- Ensure that any data exchange adheres to applicable international law, data protection and privacy principles, and is evaluated based on proper due diligence and risks assessments;
- Be subject to any applicable mechanisms and procedures to ensure that measures taken with regard to data use are justified by and in accordance with the aforementioned principles and purposes, and cease as soon as the need for such measures is no longer present; and
- Be transparent in order to build trust in the deployment of current and future efforts alike.

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OVERVIEW OF AI DURING COVID-19 AND BEYOND

The AI governance challenge is vast and complex, straddling the fields of technology, law, philosophy and ethics. As an innovator in the area of AI for humanitarian aid and development, we continued to lead efforts to ensure that the use of technology does not infringe on human rights, especially when faced with the challenges of a global pandemic.

With that goal in mind, we continued to serve as a Co-Champion for the UN High-level Panel on Digital Cooperation’s Recommendation 3C on artificial intelligence and as a Key Stakeholder for Recommendations 3A/B on digital human rights. The recommendations and discussions have been consolidated in the Secretary-General’s Roadmap for Digital Cooperation, published in June 2020, which lays out a path for advancing a safe and equitable future for all, where all people are connected, respected and protected in the digital age.

In an effort to connect our goals with the current global pandemic and to bring to the table various stakeholders and opinions, we held a high level event on Protecting Human Rights During the Covid-19 Crisis and Beyond, during the UN General Assembly in September. The discussions drew upon existing multi-stakeholder human rights, laid out a path for advancing a safe and equitable future for all, where all people are connected, respected and protected in the digital age.

Lastly, UNGP is a co-lead of the Global Data Access Initiative (GDAI), which, as stated in the Secretary-General’s Roadmap for Digital Cooperation, is a multistakeholder initiative that aims to create a platform for sharing digital public goods in a manner that respects privacy. Its main objective is to enable data sharing across the public and private sector to develop AI solutions in the area of disaster resilience, preparedness, response, and recovery.

While we wrangle with how to apply human rights mechanisms to AI, the technology continues to evolve rapidly. Organizations at the UN and elsewhere deploy AI for good every day, which makes the ethical considerations we constantly emerging in our work. The ongoing COVID-19 pandemic has seen the use of AI and other emerging technologies (to varying degrees of success) to facilitate contact tracing, combat misinformation, and even conduct biomedical research.

To ensure these and other AI tools enable human progress and contribute to achieving the SDGs, we need to be proactive and inclusive in developing policies and accountability mechanisms that protect human rights, including those that ensure access to reliable quality and unbiased data for training safe and trustworthy AI models. That will be UNGP’s guiding imperative as we forge ahead in 2021.

OPERATIONALIZING OUR APPROACHES

Over the years, our network has created AI-powered products for accessing and analyzing different data sources, some of which we believe have the potential to be scaled for wider purposes and geographies. The latest in our toolkit is PulseSatellite, a web-based tool that combines cutting edge artificial intelligence with human expertise to extract the most relevant information from satellite imagery for use in humanitarian contexts. Since its development, we’ve been figuring out how we can put this product in the hands of users in the field to free up valuable time spent by analysts performing tasks that an AI can perform in a fraction of that time. Of course the challenge is combining speed and accuracy, and this is what we tried to accomplish. Use cases for PulseSatellite currently include: monitoring population displacement, settlement mapping, damage assessment, flood assessment and identifying the direct impact of earthquakes, volcanoes, cyclones and landslides. To test its capabilities, we opened it up to UN agencies and started working with different teams from different agencies on select ideas. In July 2020, the flood assessment capability was successfully deployed by UNOSAT, our long term partner in this endeavour, after heavy monsoon rains around the Brahmaputra river and in the Sylhet district in Bangladesh.

Another example is Qatalog, a multi-faceted tool for accessing and analyzing PDF documents, radio, and historical social media data related to specific topics, themes, and discussions. The idea for Qatalog (Query / Assign / Tag and Analyze) was born out of our own experience with products for social media analysis that existed on the market but that did not fit the needs for our sustainable development and humanitarian projects. For one, while social media is widespread across most of the developed world, it is less so in developing and least developed countries, which excludes a large portion of the most vulnerable populations. Therefore, we developed a product that incorporates alternative sources of big data, like information from radio talk shows. In 2020, we integrated radio as a data source for querying and tested its usability. In addition, after discussions with colleagues across the UN, we realized that many parts of the Organization continue to use PDF documents for reporting purposes, which prompted us to include PDFs as another source of information. To streamline the onboarding of new users, which our team spent hours doing on an individual basis, we also created interactive tutorials that allowed us to get people on board faster.

Throughout the process of development, we’ve faced challenges and had to reconfigure and rephase Qatalog functions. One of the biggest hurdles was from shifting beta testing to regular use by multiple agencies, which required infrastructure changes for sustainable operations.

Based on this experience, the need for flexibility and continued engineering support have become evident. Even once we have scaled Qatalog and put it in the hands of UN users, we will need to make sure the product is properly maintained and that we have the right mechanisms in place to continue to reconfigure it. What is even more important is also making sure that the final insights, which would be used for reporting and presentations, adhere to our, and the UN’s, privacy policies and best practices. To mitigate any unwanted risks and harms derived from these insights, we drafted “Terms of Use” and “Privacy Policies” for the use of the product. We also created approval processes for any published reports for both internal and external use.

Using automated speech recognition to support peacekeeping operations was one of our biggest undertakings of 2020. United Nations peacekeeping missions increasingly need to operate in hostile environments, characterized by frequent attacks executed by extremists and militias directed primarily at military contingents of UN Missions, but also at the civilian population. We acted as the technical implementation partner to design, develop and deploy a technology framework that would enhance MINUSMA’s (the UN Mission in Mali) situational awareness. The project built on our years of experience working to develop speech-to-text technology for African vernacular languages, and transcribing and analysing public discourse in Uganda and Somalia. Applying this type of technology to a peacekeeping context though presented new opportunities as well as challenges. Our team, spread across 7 countries, worked closely with MINUSMA and our project partners in the UN Office of Information and Communications Technology (OICT) to design and build a functional prototype, which we successfully tested with our partners on the ground in Mali. Due to the sensitive nature of peacekeeping operations, we cannot go into detail on the exact nature of this work. However, based on the results we obtained in this initial phase, we will continue to build the technology in close collaboration with our partners.
As we look at the speed of change around us and the new development and humanitarian challenges that emerge and evolve, we need to be able to draw from and share each other’s experiences to become more agile and better adapted. With COVID-19 throwing the world off course, our network had to quickly change and adapt our approach to provide partners with expertise and mechanisms that would allow them to quickly respond not just to the pandemic, but also to the infodemic that accompanied it. To do that, we worked inside the innovation ecosystem bringing stakeholders together through engagement in relevant working groups and initiatives, and by increasing the number of workshops and internal capacity building meetings we hosted.

**BUILDING CAPACITY FOR DATA INNOVATION**

National Statistics Offices (NSO), which are the custodians and main producers of data at national levels, are increasingly experimenting with big data, especially in the context of the COVID-19 pandemic. In response to requests from statisticians in Africa, our labs in New York and Kampala conducted a series of webinars to build the capacity of NSOs to use anonymised mobile phone data for decision-making in response to this pandemic and future crises.

Throughout the course of 10 sessions, experts from the private sector, academia, and the UN discussed applications of mobile data with practical implications for NSOs. The sessions were interactive, combining theory with hands-on coding, and a deep-dive into how to apply data privacy, protection and ethics. While initially we had a regional focus in Africa, because of interest expressed by NSOs in other regions, we opened up the workshops more widely and ended up with over 85 participants from countries including: Nigeria, Uganda, Rwanda, Senegal, Kenya, Somalia, Ghana, Indonesia, USA, Philippines, Ethiopia, Zimbabwe, the United Kingdom, Nepal, Georgia, Gambia and Burundi.

What participants said:

“...My capacity and confidence has been built, to be able to analyze anonymized mobile phone data for COVID-19 and other responses...”

“Public and private entities should go hand in hand in times of crisis. We can take this step further to handle the pandemic better.”

“The use of mobile phone data for COVID-19 response shows that data generated by telecommunications companies are not limited to the use of the business, but can also be extended and used by the government to provide better services and policies.”

**BUILDING CAPACITY TO GENERATE STATISTICS FROM MOBILE PHONE RECORDS TO SUPPORT COVID-19 RESPONSE**

**GLOBAL SOUTH AI4COVID PROGRAMME**

The Global South AI4COVID Programme was launched in 2020 to support multidisciplinary research focused on evidence-based AI and data science approaches to aid COVID-19 response and recovery in low- and middle-income countries. It is funded by Canada’s International Development Research Centre (IDRC) and the Swedish International Development Cooperation Agency (Sida), with support from UNGPJakarta.

The inaugural cohort consisted of nine research grantees working in 18 countries within the Global South. Ranging from early detection and containment, to mitigation and forecasting, their initial work fell within two overarching themes:

- **AI for COVID-19 Policy and Decision Making:** informing policies that support and build trust in AI and data science, and strengthening the capacity of health systems in low- and middle-income developing countries to respond to epidemics.

- **User-Centric Data Innovation and AI for COVID-19:** deepening understanding of how to develop and scale responsible and evidence-based AI and data science approaches to COVID-19 as well as ensuring that those responses are gender responsive and culturally appropriate, community specific, and based on local needs and contexts.

UNGP Jakarta serves as a technical resource hub for grantees for timely flows of knowledge and expertise and plays a key role in augmenting global communication efforts, identifying opportunities for policy linkages and facilitating mobilization for action in the Global South.
HOSTING THE FIRST UN AIS BIG DATA HACKATHON

Our team in UNGP New York worked alongside the UN Statistics Division, UNCTAD, Marine Traffic, and CCRi, to host the UN’s first AIS Big Data Hackathon. The challenge featured 17 teams selected from a pool of applicants from across the world who developed innovations around two primary themes: the economic and trade impacts of the coronavirus pandemic, and the environmental impacts of the shipping industry.

The challenge was designed to highlight the capabilities of the UN Global Platform, which contains 3.6 terabytes of data from ship automatic identification systems (AIS). The winning teams were invited to present their projects to UN colleagues during the 2021 UN Data Forum. Our team also worked with them to incorporate their ideas and methodologies into the UN Global Platform.

LESSONS-LEARNED AND FUTURE DIRECTIONS FOR MODELLING THE SPREAD OF COVID-19 IN SETTLEMENTS

We invited health professionals and researchers to an informal workshop to share lessons-learned and future directions from projects that used epidemic modelling techniques against COVID-19. Participants included colleagues from: DFID, ICRC, OCHA, UNHCR, WHO, the UN Asia Statistics Office, Delft University of Technology, Durham University, Harvard University, the London School of Hygiene and Tropical Medicine and Manchester University.

In the first part of the workshop, public health officials from the Cox’s Bazar refugee settlement in Bangladesh talked about the operational challenges they were confronted with during COVID-19 and innovation experts presented ways in which human-centred design approaches can help address these challenges.

In the second half, participants discussed lessons learned from previous and current modelling efforts and laid out the challenges moving forward. From the availability of disease data, to communicating the results, to the need to design new operational interventions to replace traditional ones, participants ideated what is possible and how to get there.

For us, putting together this workshop provided an opportunity to connect with others working in this area to make sure that we coordinate our response for better decisions and stronger support for the people we serve.

DATA SCIENCE AFRICA - DSA 2020

When UNGP Kampala and Makerere University first envisioned the idea of a Data Science Africa week, they wanted to create a space for youth and enthusiasts to learn about machine learning and AI and how to leverage them to advance sustainable development in Africa.

Since 2015, DSA Africa has become a leading machine learning event for the continent. Nowadays, it is an annual event that is usually split into a three-day summer school where students, researchers, and professionals attend lectures in data science and machine learning, followed by a two-day workshop with presentations from experts from the UN, academia, and the private sector.

This year’s event took place between 24th July and 1st August and was held online because of the COVID-19 pandemic. UNGP Kampala supported its organization, as is traditional for our Lab, and showcased some of the latest functionalities in data innovations that have been developed in the past years.

Even though participants were unable to interact online as much as they would have in person, the virtual nature of the event allowed more people to participate with an overall count of over 200 attendees from about 15 countries in Africa. The majority of the participants are students in Computer and Data Science associated fields.
GEN UPON GLOBAL PRIVACY ASSEMBLY COVID-19

FOR INNOVATION TO THRIVE

UN PRIVACY POLICY GROUP

The UN Privacy Policy Group (UN PPG) is an inter-agency group that UNGP founded and which we co-chair together with the UN Office of Information and Communications Technology. Throughout the years, the Group’s work has been instrumental for the UN. The UN PPG developed the UN Principles on Personal Data Protection and Privacy, the first instrument of the United Nations for the privacy protecting processing of personal data. In 2020, the Group’s work led to the development of a Joint Statement on Data Protection and Privacy in Response to COVID-19 to help inform and guide the global response to COVID-19 across the UN system. The Statement was endorsed by UN organizations in November to reinforce our shared commitment to use data and technology in a way that respects the right to privacy and other human rights.

EXPERT GROUP ON GOVERNANCE OF DATA AND AI

We continue to chair the Expert Group on Governance of Data and AI, which includes international leaders who serve as advocates for privacy and the human rights-centric approach to data and AI in development and humanitarian practice. Since its launch in 2015, the Group has been a key contributor to the efforts and deliverables of our network by providing its expertise and guidance, including on the development of the UN Principles on Personal Data Protection and Privacy, the UN Global Pulse’s Risk Assessment Tool, and our work around data protection and privacy during COVID-19.

SMART AFRICA AI WORKING GROUP

Through the AI Working Group, our network and partners are sharing policies for strong and ethical AI across Africa, fostering AI expertise and solutions to help create the enabling environment for open data to boost AI exchanges across Africa. The working group was established in 2020. Its first order of business was creating a blueprint for national AI strategies to help guide efforts of African countries. Based on this blueprint, the group will select pilot projects which will be implemented in 2021.

SMART AFRICA DATA PROTECTION WORKING GROUP

Smart Africa is an organization initiated under the auspices of the African government that works to harmonise data protection legislation across Africa. Because of our years of experience developing frameworks for the safe and responsible use of data, we were invited to join these efforts as a member of the working group. In 2020, the group began mapping the existing data protection and privacy frameworks across the continent to identify commonalities and points of divergence. This line of work was derailed by the pandemic and is set to continue at full speed in 2021.

GSMA AI FOR IMPACT ADVISORY BOARD

This GSMA initiative defines the technical, commercial and ecosystem requirements to deliver viable data-driven products and services that adhere to principles of privacy and ethics. It is guided by a task force of 20 mobile operators and an advisory panel of 12 UN agencies, which we are one of. At the national level, the GSMA supports real-world implementations, replicating proven models and delivering market-shaping campaigns to unlock demand and address barriers. During the year, we continued to advise the group through regular consultations.

GLOBAL DATA ACCESS INITIATIVE

To enable cross-sectoral data sharing mechanisms, we joined the Future Society’s AI Initiative and the Mckinsey & Company’s Noble Intelligence initiative to create a Global Data Access Initiative. This mechanism brings together some 70 companies and organizations to turbocharge innovation by serving as a platform for collaboration between governments, the private sector, academics, and international institutions. In 2020, the GDAI organized a high level event during the UN Data Forum as a first step in setting up the technical infrastructure needed to facilitate access to quality data.
Aside from projects and products, our collaborations often yield scientific papers and technical reports where we distill our methodologies, results and lessons learned. Because we take the time to write about our work and go through the grueling process of peer review – which means subjecting our work to the scrutiny of other experts – we are perhaps one of the few recognized data and AI practitioners operating inside the United Nations. In addition, we work with UN partners to produce technical reports where we describe our experiments with new data sources and emerging technologies for the benefit of all UN.
One of the many ways we continue to learn and share what we have learned in terms of failures as well as successes is by convening diverse groups of thinkers, or joining diverse groups of thinkers in one place at one time. The COVID-19 pandemic has given us much to ponder when it comes to attendance, in particular environmental impacts, and challenges to diversity especially when hosted in the US or Europe. We’ve embraced digital convening and will be maximising these media moving forwards, pandemic or no. We’ll also continue to refuse participation in non-diverse panels and events.

### JANUARY

**Open Source Software as Critical Digital Infrastructures: Legal Technologies & Institutional Design**
14 January 2020
This workshop explored how different frameworks, foundations, standard-setting organizations, and non-jurisdictional maintenance hubs might be part of the solution to address the under-maintenance of open source software. UNGP New York joined discussions around the challenges and opportunities of open source licenses as a public digital good.

**Urban Motion Volume 3**
17-19 January, 2020
The School of Architecture, Planning and Policy Development at Institut Teknologi Bandung (ITB) organised a panel discussion under the theme “Resilience in the Era of Disruption”. Our humanitarian data advisor in UNGP Jakarta discussed how real-time sensing from non-traditional data can help governments assist vulnerable populations after natural disasters.

### FEBRUARY

**SDG 16+ Global Technical Workshop**
5 - 7 February 2020
UNGP New York attended a workshop hosted by the Danish Institute of Human Rights and The Global Alliance for Reporting on Progress on Peaceful, Just and Inclusive Societies which addressed critical challenges pertaining to the national monitoring of SDG16: Peace, Justice and Strong Institutions.

**AAAI Conference on Artificial Intelligence**
7 - 12 February 2020
At AAAI-20, one of the premier conferences on AI in the world, UNGP New York launched Pulse Satellite, our collaborative web-based tool that combines cutting edge artificial intelligence with human expertise to extract the most relevant information from satellite imagery for use in humanitarian contexts. The tool was built in collaboration with UNOSAT.

**Annual Australasian AID Conference 2020**
17-19 February 2020
In partnership with the Asia Foundation, the research conference brought together researchers from Australia, the Pacific, and Asia who are working in international development and policy. UNGP Jakarta shared research insights on how it developed MIND, a data analytics and information management system to inform post-disaster logistics planning.
MAY

AI for Good Global Summit
4 - 8 May 2020
At this year’s AI for Good Global Summit, the UNGP hosted three sessions centred on data privacy and data protection; ethical development of AI; and data for social good. The AI for Good Global Summit is the leading United Nations platform on AI, connecting AI innovators with problem owners for sustainable development. The Summit is organized yearly by the ITU and XPRIZE Foundation, with involvement from UN agencies including our network.

JUNE

EduData Summit Series
3 June 2020
The EduData Summit series explored how higher education can meaningfully use data to drive innovation for global benefit. UNGP New York shared our experience on how we can leverage data-driven innovation for education and to meet environmental imperatives. The session session gathered some 435 registrations from 67 countries.

CegX
8 June 2020
To address the question: “How do we get the next 10 years right?”, this global leadership summit and festival of AI and breakthrough technology convened forward-thinking policy makers, academics and activists. UNGP Jakarta described how the Lab implements its mixed-methods approach when designing interventions, by combining human centered design with AI and data analytics.

JULY

Data Privacy Risks and Data Protection: What Happens When Sensitive Peacekeeping Data Leaks? How Can We Prevent It?
16 July 2020
In an internal session organized by the DPPA-DPO Information Management Unit, UNGP New York presented our data protection and privacy frameworks and shared insights and lessons learned from applying our Risk Assessment Tool, a data privacy, ethics and data protection compliance mechanism designed to help identify and minimize the risks of harms and maximize the positive impacts of data innovation projects.

RightsCon Online 2020
29 July 2020
Described as the world’s leading event on human rights in the digital age, UNGP Jakarta participated in a virtual roundtable that addressed the question: Can Global South institutions survive the GovTech onslaught? Highlighting proofs-of-concept from Indonesia and the wider Asia Pacific, our Data Innovations and Policy Lead explained how with appropriate checks and governance, digital innovation can help to address the COVID-19 crisis.

AUGUST

UNDESA Expert Group Meeting
9 June 2020
The annual event organized by the German Cooperation and the Federal Ministry for Economic Cooperation and Development (BMZ) addressed the following questions: What can new technologies contribute for early prediction and warning of conflicts? How can the cooperation of international organisations in conflict prevention be improved? And finally, How can the necessary political will be generated for early detection and preventive action?

LEVERAGING DATA IN THE “NEW NORMAL”
5 August 2020
Organised by the Australia-Indonesia Centre, the webinar considered learnings from the pandemic, how data has been collected and the role of data in disaster preparedness. UNGP Jakarta shared insights from its assessment of Indonesia’s country-wide data ecosystem in relation to the availability of publicly reported data on COVID-19, as well as some of the underlying conditions that need to be addressed.

Asia and the Pacific Transport Forum
24-26th August 2020
The forum provided an opportunity for experts in the Asian transport community to meet and share thoughts on key transport issues that have come about in the “new normal”. Speaking on the theme of building resilience to future crises in transport, our team in Jakarta highlighted potential benefits of enhancing the role of big data to address changes in urban transport and shape future development of the transport system.

SEPTEMBER

SUMMIT SERIES

International Data Sharing and Artificial Intelligence Cooperation in Global Public Health Emergencies: A Virtual Roundtable
2 September 2020
UNGP New York joined a panel discussion on Data Sharing, AI Cooperation, and the Transnational Response to COVID-19 to discuss the challenges and opportunities for transnational collaboration among researchers racing to support the response to the pandemic.

Mempertahankan Semangat Keria di Tengah Pandemi COVID-19
2 September 2020
The Indonesian Ministry of State-Owned Enterprises invited our team in Jakarta to share its work on COVID-19 response in Indonesia. UNGP Jakarta underscored why effective response calls for shifting from simply innovating for the sake of innovation, to addressing underlying challenges in the data ecosystem to ensure greater adoption and more sustainable solutions.

2020 Global Virus Network Special Annual Meeting: Epidemics & Pandemics in the Modern Era
22 - 23 September 2020
This meeting focused on lessons learned from previous viral diseases and discussed preparedness for the second wave of SARS-CoV-2 and future pandemics. UNGP New York presented during a session on Information Mining and Validations and shared our experience working with WHO to mine online sources to understand dynamics of both the pandemic and the infodemic.
October

Protecting Human Rights During the COVID-19 Crisis and Beyond: Digital Pandemic Surveillance and the Right to Privacy
5 October 2020
At the 75th UN General Assembly, UNGP New York hosted a high-level multi-stakeholder panel that delved into the implications of increased surveillance on human rights during and beyond the COVID-19 pandemic. The event narrowed in on contact tracing, the use of biometric and health-related data, and other technological interventions. Co-hosted with UN Human Rights, Access Now, and sponsored by UN Member States, the discussions drew upon existing multi-stakeholder initiatives, including the UN Secretary-General’s High-Level Panel on Digital Cooperation Roadmap.

Ministry of Change Innovation CoP Week
9 October 2020
Sharing stories and lessons alongside colleagues from UNDP Philippines Pintig Lab, the Head of our team in Jakarta discussed how the team has evolved from mostly focusing on data innovation, to now embracing its emerging identity as an analytic partners accelerator for development and humanitarian action in the region. The event was a collaboration between UNDP and States of Change.

Data Science for Social Good Summit
14 October 2020
The online summit co-organized by DSSG Portugal, SoGoodData and Nova SBE showcased impactful projects, provided first-hand learning opportunities from global leaders and offered learn-by-doing workshops for NGOs, government, and tech-savvies. UNGP New York was invited to talk about its work applying AI to analyze public voices in support of the 2030 Agenda.

Safe and Trustworthy AI-Based Data Algorithms - Emerging Best Practices in the Global South and the Global North
20 October 2020
UNGPA New York organized this session at the UN World Data Forum to bring perspectives from the Global South and the Global North around the safe and trustworthy use of AI systems, especially in the time of COVID-19. Discussions not only reviewed developments in this space, but looked more specifically at how cultural approaches influence ethical considerations of AI and data algorithms and how we can develop flexible best practices for data governance and national human rights-based approaches.

Leveraging Data and AI to Achieve the SDGs While Moving Toward a Global Data Access Framework
21 October 2020
UNGPA New York hosted a discussion on the technical infrastructure necessary to facilitate access to quality data through the development of a Global Data Access Initiative. Based on discussions held during previous years at the UN General Assembly, the AI for Good Global Summit, and the World Government Summit, the session investigated three proposed use cases in Global South countries.

CDAC 2020 Online Annual Public Forum
28 October 2020
Under the theme Accountability in the Age of the Algorithm, the Communicating with Disaster Affected Communities Network organised a public forum to discuss digital inclusivity and issues that constrain it. UNGP Jakarta talked about the importance of designing inclusive solutions that also cater to the world’s most vulnerable populations, and shared how local initiatives can offer practical solutions that can be further scaled for social impact.

November

UNESCAP Asia-Pacific Stats Café Series
2 November 2020
Furthering the discourse on integrating big data sources into official statistics, UNGP Jakarta presented its research results on using mobile network data to map population displacement in the Pacific following natural disasters and leveraging real-time sensing from social media data to infer commuting statistics in Jakarta.

Global Crises and Socially Responsible Data Responses
9 November 2020
UNGPA New York was one of the organizers of this session of the Internet Governance Forum (IGF) to uncover how data sharing can provide relevant tools for prevention and management of global health crises. The summary of the workshop featured a list of case studies mentioned by speakers and participants in order to provide a menu of good practices for policy approaches.

Gender Equality & Social Inclusion Conference Call
9 November 2020
As part of Abt Associates’ Gender and Social Inclusion Community of Practice regular monthly call, UNGP Jakarta articulated how the Lab went about embedding gender in its After Dark research on the safety of women travelling at night and how the findings and recommendations are influencing transport outcomes for women and girls in Indonesia.

Indo Data Week
22 November 2020
The week-long knowledge sharing virtual event brought together visionaries, practitioners, decision makers and researchers from the fields of data science and sustainable development. UNGP Jakarta presented in its inaugural session on how Big Data can promote data-driven decision making for effective government response to COVID-19 at the national and sub-national levels.

Digital Agriculture Solutions Forum for Asia and the Pacific 2020
30 November 2020
FAO and the ITU organised the forum to share ideas on how communities can build back better through sustainable digital interventions for agriculture. Discussing its research on identifying Potential Positive Deviants (PDs) Across Rice Producing Areas in Indonesia, UNGP Jakarta described some of the enabling conditions that are necessary to ensure that successful innovations are made accessible to broad-based users.
Big Data Forum Trinidad and Tobago - A smarter future: Exploring Big Data opportunities for Trinidad and Tobago
1-2 December 2020
The Forum illustrated the potential for Big Data to add value and reduce risk across business, social and economic spheres. It also explored the transformational potential of Big Data and looked at ways to build and promote trust, collaboration and innovation across multiple sectors.

ITU World Telecommunication/ICT Indicators Symposium 2020
3 December 2020
The symposium gathered government officials, regulators, national statisticians, data producers and researchers to discuss issues related to information society trends and their measurement. UNGP Jakarta shared its experiential learnings on the feasibility of leveraging mobile phone data for disaster response in the Pacific and in Indonesia.

Report Launch: Leveraging Digitalization to cope with COVID-19
11 December 2020
In a public forum attended by representatives from the Indonesian Ministry of Women Empowerment and Child Protection, Indonesian Chambers of Commerce, and the Ministry of Cooperatives and Small and Medium Enterprises, UNGP Jakarta and UN Women presented the results from their joint research which examined the difference in outcomes and coping strategies between women and men owned micro and small businesses in response to the pandemic.

2020 Conference on Neural Information Processing Systems
12 December 2020
The conference is one of the largest AI virtual gatherings, where participants from across the globe get to share and explore some of the most cutting-edge AI innovations that are addressing real-world challenges. UNGP Jakarta had three papers accepted to this year’s conference, which were featured during the virtual conference halls.

ACRONYMS

4IR
Association for the Advancement of Artificial Intelligence
UN Agencies, Funds and Programmes
Asosiasi Fintech Indonesia
ASEAN Coordinating Centre for Humanitarian Assistance
Artificial intelligence
AI for COVID-19 Programme
Africa Infodemic Response Alliance
Automatic identification system
Association of Southeast Asian Nations
Automatic teller machines
Business to Government group of the European Union
Indonesian Ministry of National Development Planning
Big Data for Social Good
German Federal Ministry for Economic Cooperation and Development
Camp Coordination and Camp Management
Communicating with Disaster Affected Communities Network
Coronavirus Disease 2019
UN COVID-19 Response and Recovery Multi-Partner Trust Fund
Comprehensive Nuclear-Test-Ban Treaty
Computer Vision for Global Challenges
Development Coordination Office
Australian Department of Foreign Affairs and Trade
United Kingdom Department for International Development
Special Capital Region of Jakarta (Daerah Khusus Ibukota Jakarta)
Department of Peace Operations
Department of Political and Peacebuilding Affairs
Data Science Africa
Data Science for Social Good Portugal
Displacement Tracking Matrix
European Data Protection Supervisor
Epidemic Intelligence from Open Sources
Executive Office of the Secretary-General
The European Union
Food and Agriculture Organization of the United Nations
Facebook Population Density Map
Global Disaster Alert and Coordination System
Global Data Access Initiative
GIS
GIZ
GSMA
HDX
HLP
HP
IAPP
IBM
ICML
ICRC
ICT
ICT4D
IDPS
IDRC
IFRC
IGF
IOM
IOS
ISOCARP
ITB
ITDUPM
ITF
ITU
JDS
KIAT
MDPI
MILA
MINUSMA
MIT
ML
MPTP
MSBS
MMC
NBS
NGOS
NOVA SBE
NPT
NSOS
NYU
OCHA
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SARS
SARS-COV-2
SDG
SSG
SIDA
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UNESCO
UNFPA
UNGP
UNHCR
UNICEF
UNIN
UNITAR
UNODC
UNOPS
UNOSAT
UNPPG
UNSD
UNSOM
United Nations Office of Information and Communications Technology
UN Office of Internal Oversight Services
Privacy Advisory Group of UN Global Pulse
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UN Institute for Training and Research
United Nations Office on Drugs and Crime
United Nations Office for Project Services
Satellite imagery analysis programme of UNITAR
United Nations Data Privacy Policy Group
United Nations Statistics Division
United Nations Assistance Mission in Somalia
Geographic information system
German Corporation for International Cooperation GmbH
Global System for Mobile Communications
Humanitarian Data Exchange
High Level Panel
Harmful practices
International Association of Privacy Professionals
International Business Machines Corporation
International Conference on Machine Learning
International Committee of the Red Cross
Information and communications technology
Information Communications Technology for Development
Internally displaced persons
International Development Research Centre
International Federation of Red Cross and Red Crescent Societies
Internet Governance Forum
International Organization for Migration
International Organizations
Institut Teknologi Bandung
International Society of City and Regional Planners
Innovation and Technology for Development Centre
Sepuluh Nopember Institute of Technology
International Telecommunication Union
Jabar Digital Service
Korea Institute for Advancement of Technology
Multidisciplinary Digital Publishing Institute
Quebec AI Institute
United Nations Mission in Mali
Massachusetts Institute of Technology
Machine learning
United Nations Multi-Partner Trust Fund Office
Money services businesses
Mobile World Congress
National Bureau of Statistics
Non-governmental organization
Nova School of Business and Economics
Treaty on the Non-Proliferation of Nuclear Weapons
National Statistics Offices
New York University
United Nations Office for the Coordination of Humanitarian Affairs
Office of the United Nations High Commissioner for Human Rights
United Nations Office of Information and Communications Technology
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