

UNHCR INNOVATION SERVICE IN **2018-2019**
EXPLORATIONS & DISCOVERIES IN INNOVATION AT UNHCR



UNHCR
The UN Refugee Agency



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Note from the editors

By Lauren Parater and Hans Park,
Editors, 2019

UNHCR Innovation Service's "Orbit 2018–2019" is a collection of insights and inspiration, where we explore the most recent innovations in the humanitarian sector, and opportunities to discover the current reading of innovation that is shaping the future of how we respond to complex challenges.

In this publication, we examine issues from climate change and the future of displacement to how we can utilise storytelling as a key tool for making innovation accessible for everyone. We look at the assumptions behind why innovation thrived in UNHCR Brazil and how humility led UNHCR Mexico to drop humanitarian logos and focus on communicating with people on the move in new and unforeseen ways. We explored the tension between bureaucracy and creative approaches and studied what community-led innovation truly looks like in practice. We've brought voices from across UNHCR to help us unpack the role that innovation plays our day-to-day work in serving refugee populations and how it might shape the future of our work for the better.

We've also asked a lot of questions in 2018 to frame our approaches and path moving forward. For example, how might we move from seeing connecting refugees as a technology issue to one grounded in rights and normative values? And, how can we influence better decision-making through the innovation process? Each year we identify complex challenges, both old and new. We often find ourselves with a number of solutions, but more often, we are left with even more questions.

One of the results of the questions we've asked this year is the realisation that in many ways, we are very much in the dark when it comes to understanding the constellation of systems interacting inside and outside of UNHCR. Within UNHCR, there are spaces that exist in the gaps between institutional processes and services, spaces that often go undetected and hinder the possibility for swift change. These undetected spaces we can all bring attention to and thus, improve the organisation. Outside of UNHCR, too, there are many pressures, structures, and flows to which we are aligned, but of which we are not fully aware. We believe that highlighting and experimenting in such spaces is critical for innovation.

Settling at the most optimistic horizon, hope lies in the darkness beyond the limelight. As American author Rebecca Solnit explains:

The grounds for hope are in the shadows, in the people who are inventing the world while no one looks, who themselves don't know yet whether they will have any effect, in the people you have not yet heard of who will be the next... or become something you cannot yet imagine. In this epic struggle between light and dark, it's the dark side — that of the anonymous, the unseen, the officially powerless, the visionaries and subversives in the shadows — that we must hope for.

For UNHCR, darkness can be the internal systems working against day-to-day progress - craving the first spark of innovation. Darkness represents spaces yet unexplored but calling

through the vast, complex system to be interrogated by the creative mindsets of UNHCR staff. Dark spaces, like those in the pupils of our eyes, contracting in new light, can bring about clarity and colour as we approach new challenges. We can celebrate darkness as an avenue to the future, one that we can point a light towards and shape.

As we move towards the last year of this decade, we want to recalibrate our compasses so that they all point to the same guiding stars, uncovering different spaces and possibilities. How do we behave in the face of the unknown? How do we communicate with people with different value sets? How does contested territory become common ground?

We continue to move forward in trying to understand how otherness in forcibly displaced communities affects identities and worldviews. We are eager to explore the tension between curiosity and fear, and the role of decision making when humans no longer know best. Is it true that we have already straddled the era in which algorithms and machines have resolved to make the world better for humans and the environments we inhabit? We did tell you we asked a lot of questions...

Additionally, the innovation sector craves quick fixes and immediate results. The need for lightning-fast solutions exists in parallel with a world where internal processes require patience and time. It takes time and requires fortitude to explore the unknown; it takes time and endurance to believe in something that has never been

done before. There are techniques to make this process efficient, but sometimes innovation is neither effective nor efficient. In the search for efficiency, it is sometimes easy to lose sight of what innovation is, or looks like in the humanitarian sector. But we would argue that innovations that have made a difference towards the world have necessitated exploration, patience, resourcefulness, and curiosity at their core.

There are spaces and challenges we have yet to explore or to bring to the forefront of our work, but each step reflects progress and learning. In 2018, one of these new areas of exploration was an in-depth study into communication and inclusion, diversity and gender equity with the goal of shining a light on issues that sometimes are missed. We will continue to examine ourselves as a collective effort, with a collective vision for the future, as well as investigating the previous and future pathways to change. Are we open to exploring more? Are we conscious about who gets there first, and does that matter? And when we do discover the new, what happens when we land and start digging deeper into new areas of work?

We hope you'll join us as we attempt to answer these questions.



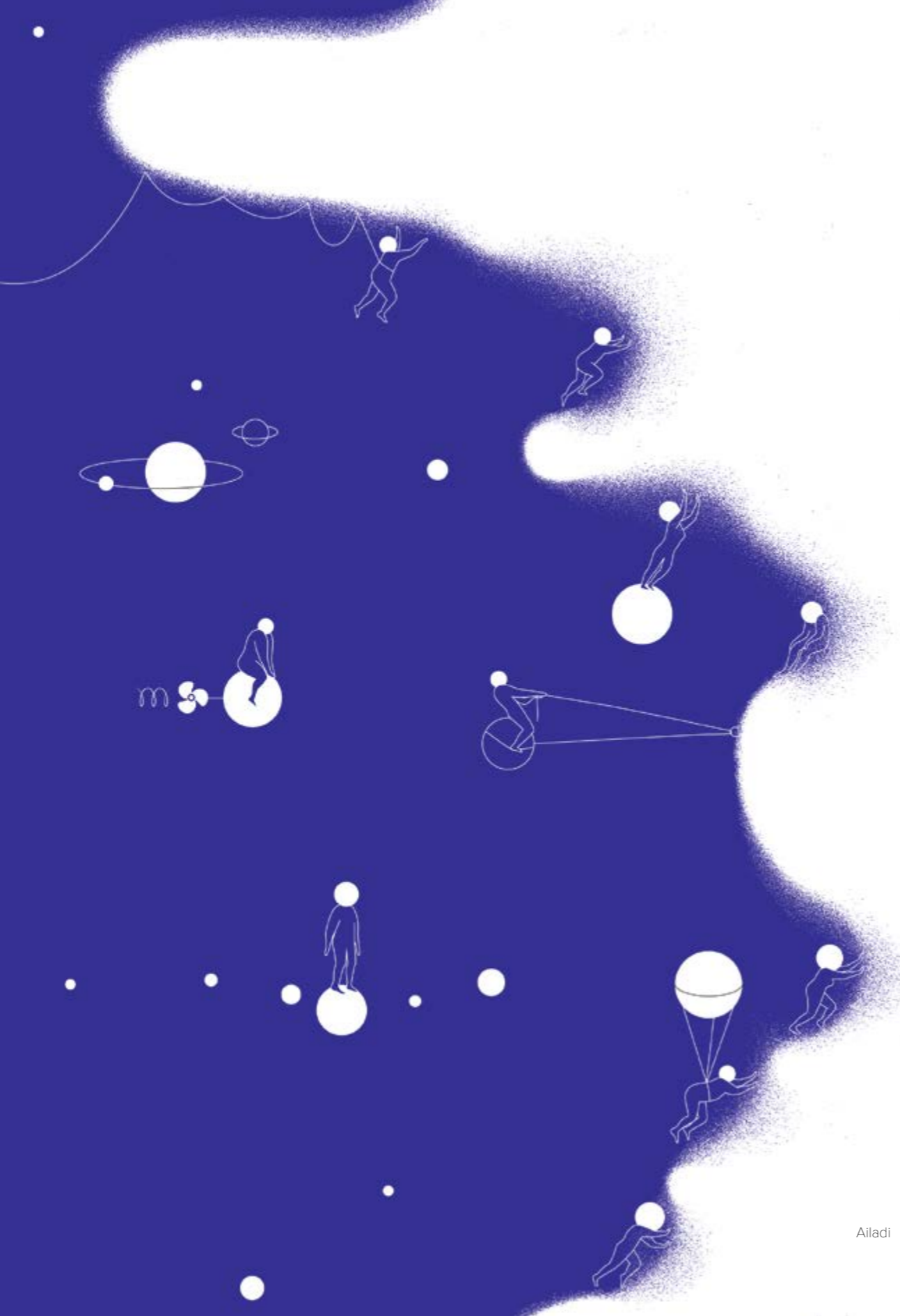
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For the sake of the future, innovate courageously

By Chris Earney,
Head, ad interim, UNHCR Innovation Service

The 1951 Refugee Convention was a moonshot, and perhaps one of the greatest innovations that plays a role in my professional career. Nations agreed that forced displacement was not only something that must be a responsibility shared between nations, but also inherently a shared responsibility to solve. It was novel, had utility, and was successful, it provided a space for yet more innovation for organisations such as UNHCR. Indeed, our curiosity to iterate, our curiosity to try out the new, our curiosity to adopt and adapt has been a part of who we are since the beginning. UNHCR was born from innovation. It's central to our efforts to protect, it's central to our efforts to assist. It's central to our efforts to exist as a humanitarian and protection agency.

UNHCR has always been innovating. Currently, in Quito, Diego Nardi is working on challenges around how we communicate with communities. In our Global Learning Centre, Clarisse Ntampaka is working out how to train people on protection more effectively. In Nairobi, Sandra Aluoch and Kent Awiti are scaling connected learning across Africa. At Headquarters, Andrew Harper is working out with Noriko Takagi how to better measure UNHCR's impact. Salvatore Vassallo is working out how to scale backend processes that further enable the scaling of projects such as the Higher Education Accelerator. Netta Rankin is grappling with Artificial Intelligence and human resources systems. The commitment and efforts to innovate exist in our organisation, in the obvious but also in the prosaic. They exist agnostic of age, and professional profile, and they exist because of a huge diversity of thought.

The world for refugees and others forcibly displaced has already and will become even more complex. And our *raison d'être*: protection of forcibly displaced people, will become increasingly more complicated. Our ability to change and adapt, our ability to innovate, will either greatly improve the provision of protection and assistance to these people, or it will not.

I'm not making the case for innovation being a panacea, I'm saying that it's an important tool, an important part of what we do, and how we do it—including how we solve challenges big and small.

At such a complicated and complex time, we must not only invest in innovation but also our ability to effectively change and adapt. Five things that I've been trying to grapple with when I think about how our service can support UNHCR in 2019 and beyond:

People are moving in different ways. They have better information, make better informed decisions and are experiencing new pressures. The nature of movement also seems to be changing, with people moving to different geographies in different ways, and in different numbers. Having been displaced, people are seeking better livelihoods opportunities whilst displaced, more and more people are moving to urban areas, to cities. More and more people are going to Amman, Nairobi, Panama, and Berlin. As border walls go up, more and more cities are recognising the value that displaced people bring to them—recognising the value of diversity, and the contributions that people bring to cities. We can use innovation to move and to respond differently, we can use innovation to have a better

idea of what that movement is, what it looks like, to anticipate it better.

People are moving differently, which also means we need to respond differently. We must experiment more around what a dignified existence looks like, whether in the suburbs of Kabul, or the inner cities of Kampala, Kinshasa, Bogota, Mexico City, and Rome. Sometimes that means capitalising on our experience of working in places such as Peshawar, or Assosa, translating lessons learned into new approaches. Sometimes this is going to mean completely new approaches that we need to generate knowledge around and through.

The physical world in which we live is also changing. The climate is changing. And we know that this interacts with the decisions people make to move. It interacts with resources available to people. It interacts with the nature of conflict. Through our work predicting displacement in Somalia, we know that the weather in Western Australia has a direct impact on the weather in Somalia. It's called the Indian Ocean Dipole. We need to be more aware of these global climatic changes and what we can expect of them in the future. Our member states are already doing this, private sector organisations are preparing for these changes within the geographies that they operate, thinking very much about how the behaviours of their customers will change, as their needs—perceived as well as real—adjust. Some are in the process of preparing to completely change their business models. We need to be prepared to also make big changes in how we understand future contexts, and how we provide different services to those we serve, in turn.

Technology is also changing at a rate that we cannot keep up with. We are seeing technology emerge from all corners of our planet. Some of it empowers us. It enables citizens to express their opinions, and to attain proximity to leaders, and to organisations, that was previously impossible. I can tweet to Paul Kagame, the President of Rwanda, and he might respond. I can express my opinion on the most recent iteration of an approach to Brexit. I can connect, and I can engage in ways that I would never have imagined.

And refugees can do the same. We must ensure that we are ready and able to engage in the ways that people now expect us to be able to. But we must also ensure that we're ready to change our approaches based on feedback provided through the engagements that are now possible.

We are also able to influence the way in which technology is developed—and why. We can inspire. But we must inspire ethical production methods across our sector and beyond. We must ensure that end-users are consulted. We must ensure that the most vulnerable are consulted, ensuring that they are not left behind, to ensure that their needs are taken into account so that technology does not evolve for the most powerful, for the rich, for the mobile. So when we look to the future, and signals of emerging technology, emerging algorithms, new ways to create insights, we need to be able to influence not only the how, but also the why. The values of 'we the people' must be reflected in the future. We need approaches that motivate the private sector to be more ethical and accountable.

Looking back to push forward

In 2017, this Service embarked upon another ambitious agenda of change to its own approaches. It sought to make innovation as accessible as possible to as many people as possible. We sought to look at different types of innovation approaches, from incremental innovation engines, to accelerators and scaling. We trained more Innovation Fellows, we trained entire operations, providing them with the knowledge, the processes, and promising innovation practises. We challenged bureaucracy. We served an organisation that knew it needed to change—and wanted to. The approach and efforts reflected the people that make up the organisation that we serve. This includes people who don't necessarily self-identify as innovators that creatively work the bureaucracy the world over. Those communicating the hows, whos, and whys of what we do. Those creating evidence and insights for change, those creating partnerships, those working on frontline efforts to communicate and better protect.

In 2018, we continued on a path of change, seeking to base our work more explicitly on the values that our Service stands for. We thought that being values-driven would make us even more accessible to more people, so we looked beyond what seem to be becoming the more established models for innovation in the UN and humanitarian fields. We've always shied away from articulating our definition of innovation and instead have tried to articulate the behaviours that represent the mindsets that we need to see the length and breadth of the organisation. So, we embraced transparency, collaboration, we embraced our curiosity and our willingness to learn. Perhaps most crucially, we embraced an agenda of diversity and inclusion.

We recognised the importance of the diversity of thought that exists within the organisation, and that we need to make the most of this. We recognised that diversity is meaningless without corresponding inclusivity. We needed to create more opportunities to exchange, and discuss. That meant that we more actively engaged those who don't necessarily self-present as innovators. So we worked with the 'deep Headquarters', such as Human Resources, Legal Affairs, as well as the so-called 'deep-field' colleagues. We used Artificial Intelligence to spot patterns, and to support humans in their endeavours to make better decisions. What we found was that using values made us closer to more people. Innovation became more principled, much easier to understand, and therefore yet again more accessible. All the while we created more lessons and more insights.

We learned that more work is needed to create that culture of innovation, or rather, to more explicitly recognise and embrace that culture. We learned that more work is needed to create bureaucratic spaces where innovation can thrive. We learned that a stronger compass is needed

for us to guide our direction, and that requires a more robust method to look into the future. And we learned that these three things need to happen together.

Actions we're taking

In 2019, this Service is going to try to take another brave step forward. And it's a step firmly into the future of displacement. It's one that invests in the now, for the future. It's one that creates the enabling environment for innovation now, but looks to the future to guide the what, and the how of the investments needed now for that future. The UN General Assembly has adopted a new framework: the Global Compact for Refugees, which also gives us an opportunity to up our game, to up our aims to match this new framework.

For 2019, I propose a new agenda for innovation within UNHCR and beyond. It's an agenda that questions and interrogates the more commonly associated nomenclature of Labs and Accelerators, UAVs, and 3D Printing.

The first thing that we need to do is that we again need to drive diversity and more inclusive approaches to innovation across our operations and at Headquarters. Too often our innovation stories are dominated by males, and too often we see our innovation teams focus only on technology, perhaps a hapless hope that tech will save us.

The first thing that we need to do is that we again need to drive diversity and more inclusive approaches to innovation across our operations and at Headquarters. Too often our innovation stories are dominated by males, and too often we see our innovation teams focus only on technology, perhaps a hapless hope that tech will save us. And that just isn't true. This results in approaches that are at worst, divisive and exclusionary. At best, it risks distilling innovation into something that many people just do not understand.

So, our first agenda item is to expand our efforts to build a stronger culture and set of competencies around innovation, within UNHCR and beyond, so we're going to double-down on these efforts. The Fellowship will continue. But we'll open it up to more partners, we'll open it

up to more people who want to learn about the tools and methodologies, the approaches, that underpin this important work. We will take another 25–30 individuals who go through a competitive selection process, through an intense 12 months of innovating together with their colleagues. These individuals are an inspiration to our Service, and to UNHCR. They have a history of innovating already. They are out there somewhere, pushing boundaries, trying to nudge our organisation and others into the future. They will sometimes feel very exposed, sometimes unsupported, and many times simply frustrated. They're essential for the future UNHCR that future generations will inherit.

We're also going to continue much-needed support through our workplace innovation approaches but we're going to do that through projects rather than carrying out training only for whole offices. We'll do that concurrently with requests for support from field operations, and from HQ entities, so that we're matching projects with knowledge transfer around innovation—building that capacity by doing. We realised that we're often missing a step when it comes to project support, and that step is around competency building.

So whilst we can go to Nigeria, or Uganda, or Tanzania, or the Americas, or support any number of operations remotely; the friends, colleagues, and partners who are trying to drive change, also need the skills to drive that change. For managers of innovators, we need to put more effort into recognising their own efforts in creating space for innovation to happen. They also need to feel empowered, and informed. They should know when, how, and who it takes for innovation to happen. When they should embark upon an innovation process. They also need the knowledge and expertise to innovate. So we're also going to step up our efforts to support our colleagues who have been with us for a longer period of time.

Those who have been innovating our organisation for decades—but perhaps do not see themselves as innovators. As with any other tools and methodologies, innovation has created new tools and new methodologies that

at times scare people. The language used, the nomenclature, the association with technology, can make innovation the opposite of what it needs to be: it alienates and becomes inaccessible for those who want to be involved but just don't know how. For some, who are now managers, this means simply creating spaces for innovation. Spaces of diversity and inclusion, spaces to discuss, to talk, to share ideas, and to identify problems. So we're going to work with these colleagues who we look to somewhat as our north stars, our institutional knowledge, our mentors, managers, and leaders, and we're going to make sure that they understand how best they can lift others up.

Secondly, this agenda must closely align itself with other changes that are needed in order to drive for sustainable approaches to innovation. We see an endless cycle of pilots and experiments the world over, which never reach 'scale'. Time and time again we scratch our heads, baffled by why projects didn't reach more people. And simply put, that's because our approaches to scale have not been invested in sufficiently well. And I'm not referring to money. I'm referring to how we not only record and share lessons learned, but how we then convert those into actions beyond our own Service.

We also reflected that cookie-cutter approaches to innovation will only relegate innovation to a gentle tinkering around the edges. For the future of UNHCR, and indeed the UN, we will need braver approaches. More certainty in what we're doing. More courage in doing it.

Approaches that challenge the very bureaucracies that at times protect, but at times stifle, and inhibit. We must be sure that we want the changes that the rhetoric seems to indicate. Transformational changes are needed from within our bureaucracies to scale up, to scale out, to increase value in what we're doing, to scale the processes of scaling, to make innovations more successful for more people. We can challenge some of the assumptions that underlie the often seemingly rigid bureaucracies that seek to protect our institutions, as long as we use the tools of dialogue and respect. We have to do this strategically. Collaboratively.

We have to work more closely with the people who don't necessarily self-identify as innovators, but certainly make innovation happen. In our recent past, we've seen Programme Officers make decisions to invest in partners, to invest their time and efforts into making somewhat non-traditional partnerships work out. We've seen Administration Offices find ways through the sometimes challenging procedures to provide resources to staff in unusual ways. We've seen human resources staff work out how to hire those profiles we need for the future of our organisation. These people need more support, and frankly, more recognition for their efforts.

The third thing we're going to do is invest in the future. Gaining a deeper understanding of how changes occurring now and in the next emerging decade(s) change will impact not just our world, but specifically on those that are displaced. This is essential to ensure that our business model and service delivery is robust enough to not just withstand those changes, but that it is agile enough to navigate these emerging complexities and to be fit for purpose.

We are an organisation that is constantly responding to crises of displacement. But constantly responding to the issues of today runs the risk that we might lose touch with what is emerging in the ecosystem around us. This in turn puts our organisation at a real risk of not being able to be better prepared for the crises of the future, continuing to run the same types of services and programmes that might not be relevant.

Whilst we can't predict the future, we can prepare for it—by ensuring that our organisation can be agile and flexible enough to creatively respond to the possibilities that might arise. Investing in potential futures means that we can invest in experiments and innovations today that would place us in good stead for what might emerge, and be able to respond more effectively and efficiently. This will require investing in non-traditional partners who can help build the future we envision.

This agenda is more courageous than any of the agendas we've previously set in that it looks

much more deeply at what needs to change, in really quite complex parts of our organisation. And so should it be. It's in UNHCR's character to try to be so. It's the character of the partners we work with. We cannot do this alone. We must match the ambition, with the ethics and morals of the UN, together with the best brains that exist also outside of our organisation. These brains exist often in people who do not work for UNHCR. People who do not work in 'the field'. We must partner to achieve these ambitions, we must partner to challenge our own assumptions. And we must partner to learn, and to adapt.

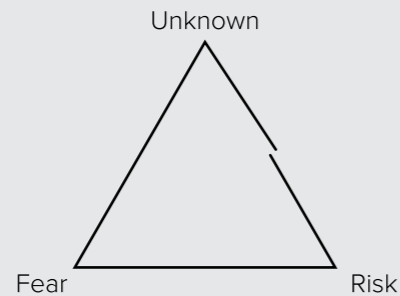
So our 2019 approach to innovation is even more challenging than any we have used before. It's a big departure from the Labs approach we started out with in 2012. It's an approach that looks forward, as well as critically at the prosaic spaces of our organisation and at the same time recognising what more we can do to adapt our culture, as well as the competencies that we need in order to innovate for that future existence. I think it's more determined. It's more inclusive than we had ever intended previously. And it's bolder because of all of this.

Our commitment rests with those we serve, and those in the front lines in the field, and the front lines at HQ, and everything in between: a UNHCR that is ready for the future of displacement, and an Innovation Service that helps us all to get there.

So our 2019 approach to innovation is even more challenging than any we have used before. It's a big departure from the Labs approach we started out with in 2012.

Why is innovation so difficult? An ode to all innovators.

By Emilia Saarelainen,
Innovation Fellowship Programme Manager



We all know that innovation is hard, but why exactly is it so difficult?

Innovation is about people

Before we can even start talking about the difficulties of the actual act of innovating, we need to be clear on what we mean by innovation and what's needed to innovate.

Innovation doesn't happen without innovators. Innovation is not about finding the new bright idea, it's not about having all types of processes in place and it's not about technology. It's about people, those ones who are passionate about what they do and want to drive change. People are the backbone of innovation. And that's exactly the reason why it's also so difficult. People, you and I, us and them, are required to make innovation to happen, but we are also part of the problem and a reason why it is so difficult.

We have a very limited understanding about who is and who can be an innovator. An innovator is seen to be a lone inventor, an Einstein type of individual (usually a white man) sitting alone in a basement and coming up with new ideas. Innovation is often understood as "the best idea" and an innovator as the one having a light bulb moment magically leading to a successful implementation. This narrative is misleading as innovation is not just about generating ideas and innovators are not just inventors. Anyone can innovate, regardless of age, nationality, position or gender. Innovators have the right attitude, a creative mindset, and an ability to see things differently and bend the boundaries. And most importantly, they have a desire to solve complex challenges - and given the right tools, attitude and environment, each person has the power to create change.

Innovation requires a wide range of skills

When we talk about innovation skills, we typically talk about just one type of skills, creative (thinking) skills, i.e. an individual's ability to generate new ideas, solve problems and think creatively. We think about artists or entrepreneurs who seem to have creativity as a gift to do something magical (while the rest of us just

admire it from aside). But this is misleading because, first of all, innovation skills are not just about creativity skills and second, being innovative is not the privilege of a few select persons; it's possible to learn how to be creative and how to be innovative. There are tons of tools and techniques to help you to enrich your creative skills, i.e. have new ideas, think creatively, overcome your thinking habits, etc. Additionally, there are innovation tools, methods, and guidebooks that help you to go through the rest of the innovation process and provides tools for identifying a problem, test assumptions, design and guide through an experiment, etc.

So, the good news is that anyone can learn to use innovation tools, the bad news is that it might be the easiest part. Innovation is not just about tools and methods, but it's also, and even more about mindset. Innovation is an iterative process, uncertainty and unknown being an inevitable part of it. Going through that process requires one being comfortable with confusion, failures, and disappointments and it's not always easy or pleasant. Innovating can be nerve-wracking, uncomfortable or even scary. There's no toolkit to help you to teach it or prepare for it, the only way to learn it is to go through it, experience it and learn by doing. As an innovator, you need to be persistent and have resilience for all this.

And as if this would not be enough, there's a third set of skills that is important, especially for those innovating in a large organisation: communicating, influencing, and convincing. Whatever you want to do, it needs to be shared with many different actors in the organisation. It needs to be communicated in the right way to the right people in order to make anything happen. And often making the case isn't sufficient, facts don't convince people, but you need a strategy on how to get people on board and make the change. Innovators don't act in isolation, they are working in a specific operational and political environment that they need to know how to navigate.

Innovation is not something you can learn just from books. There are tools and methods available for innovators, but they cover only a small

part of skills one needs to innovate. Also, tools and methods don't mean much, if they don't lead to a change in behaviours and habits. And in order for innovation to be fully practised in daily work and for it to become a habit, you need time, effort and practice. It's about creating "muscle memory" for innovative ways of thinking and acting. The only way to learn innovation is to actually take action and do things.

No one can innovate alone

Anyone can be an innovator, but no one can do it alone. The range of skills needed to innovate is so large that it is unlikely that one individual will be strong on all of them. Needed skills are also changing throughout the process (for example, idea generation requires different types of skills than scaling), individuals simply can't have them all. So, we need to work with others, we need teams to innovate.

Innovation is all about collaboration. At its simplest, collaboration means working with others to achieve something. However, as we know, in reality working with others is not always that easy. It can feel frustrating, draining and unproductive. The more diverse the team is, the harder the collaboration can be (but the outcomes are better!). There are more perceptions and different viewpoints to consider, a greater exchange of knowledge, decision making takes more time, and there's always a possibility for a conflict. For individuals wishing to innovate this means yet another set of skills for them to master- collaboration skills. Collaboration requires a high level of trust and emotional intelligence. For talkers, it might be difficult to be quiet and listen (actively!), for less talkative and/or reserved people, it can be difficult to make themselves heard; you need to be able to communicate your point of view openly and effectively and be willing to compromise; and you must have the ability to be tolerant and accepting of others. People need to be able to let go of control and their own ego and believe that collaboration and working with others will bring possibilities to create something greater than working alone would.

¹ Diverse Teams Feel Less Comfortable - and That's Why they Perform Better, Harvard Business Review.

If collaboration is hard for individual team members, it's also hard for supervisors and managers trying to manage and support a diverse team. Too often we assume collaboration will happen when a group of people are put together. It doesn't. It requires goals and methods and a lot of it depends on managers' skills to create an environment fostering and supporting collaborative efforts.

People need to be taught to act together in multidisciplinary to develop novelty into innovation, supervisors and managers need to be taught to lead and manage teams and collaborative work, and the leadership need to set the tone for a true collaborative organisational culture.

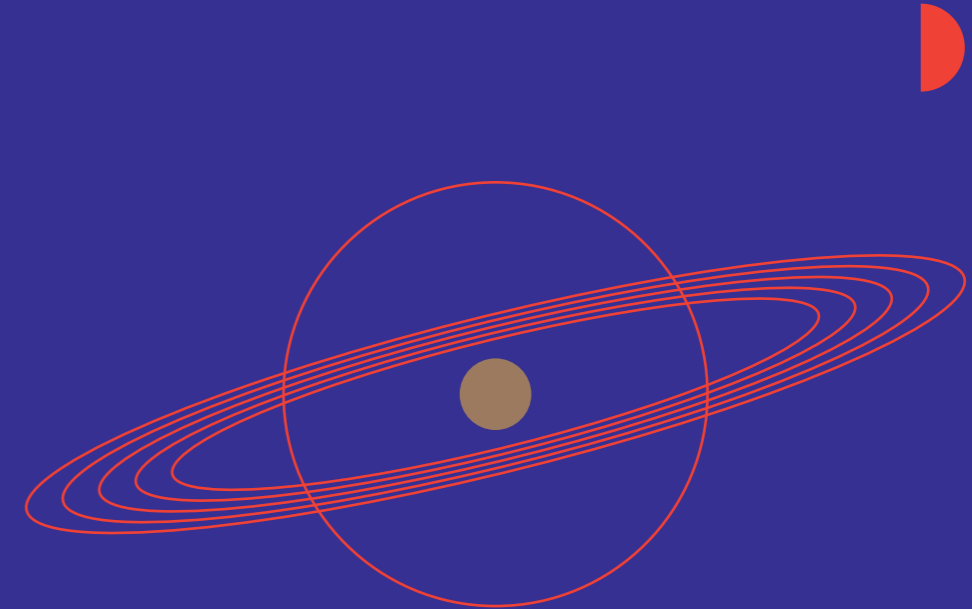
We are afraid of innovation. All of us

Innovation is scary, but what exactly are we afraid of? Well, we experience the fear of making a mistake, failure, unknown, uncertainty, looking foolish, being different, losing control, disappointing ourselves, disappointing others, imperfection, taking the first step, taking a risk, getting no rewards, rejection, losing face or prestige, being judged, thinking we are not creative, and change - just to name a few.

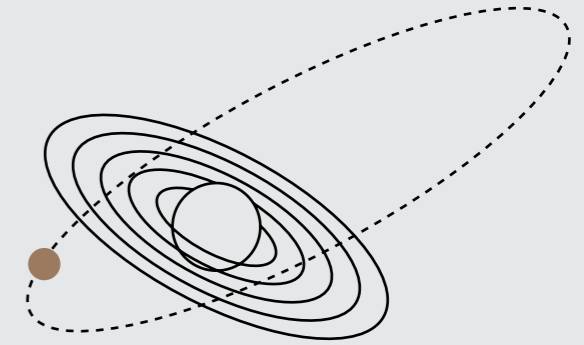
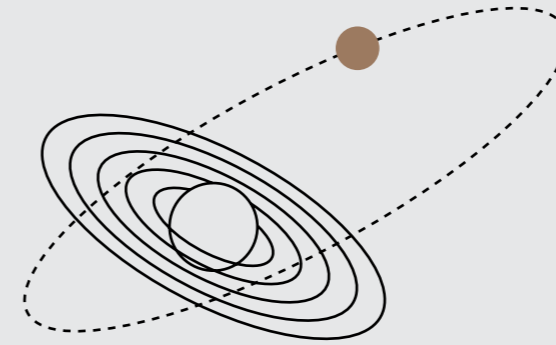
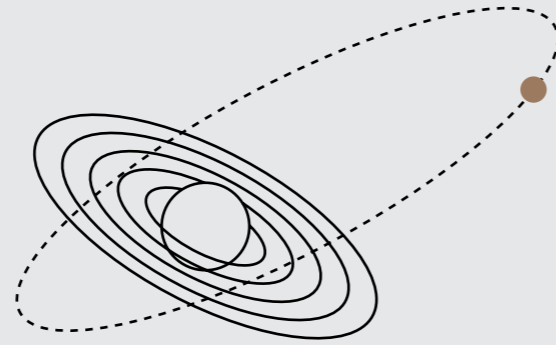
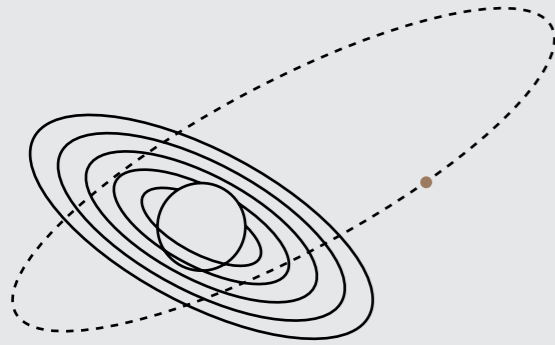
Fear is a strong emotion as it prepares us to react to danger. It can slow some functions of our body down, while sharpening other functions helping us to survive. These are normal reactions, our brains are just trying to protect us from harm, but it's not pleasant to experience them and the natural reaction is to avoid them. Fear can paralyse us from taking action and ultimately, hold people back. Therefore, fear is not a friend of innovation, so we need to find ways to deal with the emotion that hinders it and thus, in order to find a coping mechanism with innovation fears, we need to understand them better. Here's a list of three of the biggest fears associated with innovation.

1. Fear of unknown

The dominant and the strongest fear of all is the fear of unknown. By nature, most of the people tend to prefer certainty. The problem is that innovation by its nature is characterised



There's resistance to innovation, because there's resistance to change. People don't like to change. People like the status quo and we want things to be as they are. How often have you heard managers and organisations praising innovation, but when it comes to action they tell you "We can't do that, because that's not the way we do things here," or "We have tried this before and it doesn't work."



by uncertainty. In innovation (jargon), this uncertainty is often divided into two: there are known unknowns and unknown unknowns. Known unknowns are something that we know we don't know. There are risks involved in such situations, but they can be calculated and managed with risk management, which reduces the uncertainty and provides us with some kind of feeling of certainty. Whereas, unknown unknowns are something that we don't know that we don't know. It's a kind of uncertainty that can't be dealt with risk management, it can only be managed by experimenting and learning. Preparing yourself or your team for the uncertainty and unforeseeable is difficult, if not impossible. You are asked to jump in and to try something of which the outcome is uncertain. The fear of the unknown leads to problems in dealing with uncertainty. Something unexpected might happen, which would be different from what people are used to. No guidebook can prepare you for how it feels to be in the middle of uncertainty without being sure of what direction to take. Essentially, managing innovation is about mastering uncertainty.

2. Fear of failure

Most individuals, managers, and organisations are fearful of making mistakes. Failing is considered shameful and painful. However, failure is an inevitable part of innovation. It doesn't mean that failing more often would directly lead to innovation, of course not, but more frequent trials (with learning from them) most likely do. And the more trials you do, the more unsuccessful trials (or better to say, trials with negative results) you

may experience - and that may feel like a failure. Fear of failure keeps us from taking a step into the unknown, and not even trying and that paralyses innovation. It's normal to experience fear of failure as most of us have gone through an education system that taught us that failure isn't a positive thing. We were rewarded only for the best grades and taught that we always have to know, we always have to win. But innovation doesn't work like that - it doesn't flourish in such an environment. There isn't always one right answer, you may need to try (and fail) several times before succeeding. And you might still not succeed. But what is comforting is that fear of failure is mostly a learned emotion and we can unlearn that.

3. Fear of risk-taking

Most people are risk-averse and would prefer to go with a tried and tested solution rather than taking their chances on an unproven solution.² Taking the known solution, playing safe is comfortable as it makes us feel in control. Innovating is the opposite. There's no feeling of control and it gives you a sense of insecurity. Risk-taking is scary because nobody knows if the risk you take will pay off (that's why it is called risk). But any kind of development is impossible if you never take any risks - especially if you wish to try and build something completely new, some level of risk is inevitable. It is easier to embrace the risk, if we understand what we mean by risks. In its simplest form, risk can be considered as something that can lead to a damage, this

² Creative Action in Organisations. Chapter 21: Why no one really wants creativity (Barry M. Straw)

can be for example a financial loss, reputational damage or in the worst case, harm caused to people we try to help. So risks should be taken seriously, but they should not prevent us innovating. Taking a risk doesn't need to mean to bet everything, there are ways to mitigate the risk (for example: through experimenting and learning). It is also good to remember that doing nothing, inaction, can also be a risk. Often the fear is bigger than the risk itself.

All these fears are normal, and they don't only cause fear to innovate, but they also may prohibit others from innovating. Managers and organisations experience exactly the same fears of the unknown, failure, and risk-taking as individual innovators or teams do, but their fears are often turned into resistance. So even if you as an innovator have managed to overcome your fears (or more likely, to act despite your fears), you still have to persuade the others to come to your side. So, it's actually not enough to deal with your own fears, you need to find a way to deal with other people's fears as well.

There's always resistance

There's resistance to innovation, because there's resistance to change. People don't like to change. People like the status quo and we want things to be as they are (sometimes even if we claim otherwise). How often have you heard managers and organisations praising innovation, but when it comes to action they tell you "We can't do that, because that's not the way we do things here," or "We have tried this before

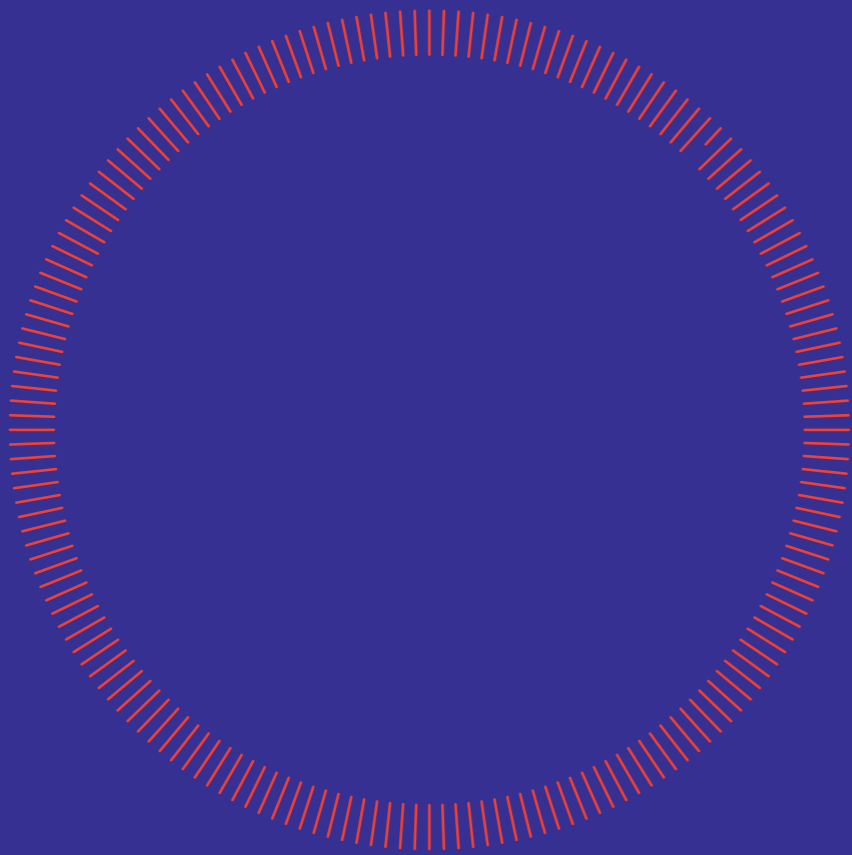
and it doesn't work." What do you do with all these innovation competences and enthusiasm, if there's no space to use them? Typically, large organisations are designed to execute and be efficient, not to innovate. They are built for short-term performance, not for innovation. So, in a way innovators go against what the organisations are designed for. Organisations do need traditionalists too, they have a role in organisations, but they don't always make innovators' lives easy.

Innovation requires that managers at all levels of the organisation encourage, and create the space for staff to innovate and experiment in their day-to-day work. They must decrease fear of failure and create an environment of psychological safety. The real innovation challenge is overcoming organisational resistance.

Innovating is difficult because innovation is difficult. It's not just about learning tools and methods but it touches upon a variety of emotions (innovators as well as others) and it's embedded into experimentation, collaboration, and diversity. It's about going through a journey that can be unpleasant, lonely, and scary and it requires people who have passion, drive, and resilience to go through it all.

Innovators, praise yourselves. You are superstars.

A New Compass: Navigating the dark matter of institutional innovation



By Salvatore Vassallo,
Senior Admin and Programme Associate &
Balint Pataki,
Admin and Programme Associate

In the universe, there is much more that is unknown than is known. Everything on earth, everything in the universe that has even been observed by scientific instruments, all normal matter adds up to less than five per cent of the universe. The rest of the universe is comprised of dark energy and matter – everything that is not in the form of stars and planets that we see. This unseen matter touches everything – and yet is situated between all the things that are known.

So, what can dark matter teach us about innovation? Within UNHCR, there are spaces that exist in the gaps between bureaucratic processes and services, spaces that often go undetected, just like dark matter. These spaces straddle multiple departments – from human resources to administration, and procurement – and much like dark matter, can be the richest areas of growth and innovation. We need to act where these unmet and unarticulated needs are discovered to create new opportunities for innovation.

Innovation in these straddled areas within large humanitarian organisations doesn't get enough attention. Humanitarian innovation often lives in rigid silos that are situated upon us – education innovations, energy innovations, technology innovations or innovation in emergency response. But bureaucratic challenges touch all these points of light in the humanitarian context. Whether it's budget or programming – these institutional forces walk hand in hand in serving refugees at UNHCR. One cannot exist without the other and both sides of the coin require new approaches and new ways of thinking to prepare the organisation to be fit for the future.

Lighting up unseen spaces and unmet needs

If we look at the Latin roots of the word innovation - "in-nova-tion" – it literally means "in a new way" or to "make changes to something established." In this sense, innovation can be a means of improvement or renewal, moving against the status quo. More importantly, understanding challenges and learning from previous missteps is key for improvement and innovation. Most people are always searching

for methods to improve their life and wellbeing; there are whole business models synced with books, courses, and retreats that are focused on improving yourself.

So, why don't we speak more about improvement within our workplace? The space where we spend the majority of our time. And what does it mean to create a space or "room for improvement" within our organisation? We view it this way:

The word "room" can be recognised as an unseen space where there are numerous possibilities to innovate. Similar to the dense dark matter mentioned above, these spaces often go unnoticed regardless of the untapped potential for transformation. We are at a crucial moment where innovation is at the forefront of methodologies to address complex challenges. But ultimately we will never be able to truly become an innovative organisation or sector if we cannot light up these unseen bureaucratic spaces and begin to innovate within them as well. How can we mainstream innovation in UNHCR's emergency response if we are not innovating the back-end processes that support these responses? How can we improve services to displaced populations if our administration and programming services aren't fit for purpose?

In the end, innovation needs a starting point in our processes – it does not have to act as a complete overhaul and should not replace modernisation efforts. We do not have to start with reinventing the wheel itself but we can review the cogs of the wheel and see how they can be readjusted and refit for a new model.

For example, the famous memo approval process in UNHCR. We initiate hundreds upon hundreds of memos every day for a wide range of specific reasons. This can include special leave without pay, a budgetary increase, the transfer of money between different locations and entities – some of us work with memos literally all day long. But these memos are often a legacy from the time of telex and the first typewriters. Memos are lengthy, consist of multiple pages (which often say very little) and are extremely time-consuming. Frankly, we don't believe

people even read them sometimes. However, this is the way UNHCR has always handled memos and this is how we do business. The issue of memos is precisely one of these unseen spaces – institutional dark matter – that should be recognised, lit up and innovated as a process.

Why aren't we speaking about automated processes for memos? If we are requesting leave without pay, wouldn't an automated email sent from a proxy server be enough proof that it is us requesting leave? Take another example: the electronic signature. The electronic signature is a reality, and has been a reality, in many sectors for a while now. At UNHCR, we are just starting to look at this issue with serious eyes as an alternative to individually signing each page of a document manually. This is another illustration of a space that could significantly benefit from a new way of doing things. Institutional innovation craves Artificial Intelligence solutions – something that is clearly integral to not only the future but the present too.

The gravitational resistance

At the Innovation Service, we have tried to look at how to improve processes at UNHCR. In reality, these have sometimes ended as a vain attempt because of the resistance to this renewal and the pull of the future. As usual, we fear this sentiment that other innovators across the organisation feel when they are trying to innovate. When we speak about organisational change we focus on these very technical elements – structures, roles, processes – but neglect the equally important human element. This resistance to change is extremely psychological and human; it is shaped by cognitive biases and schematic processing of information that allows our brains to take the easy road by focusing on assumptions and previous conclusions. These biases then form an individual's mindset – and very often their resistance – to organisational change.

This resistance can be countered by communicating the existing promising practices in bureaucratic innovation. We've seen real attitudinal changes in colleagues towards innovation

when they can see that a new idea has been tested before outside of the organisation. UNHCR works extremely closely with the private sector to fulfil our mandate, whether it's creating new digital products or providing connectivity in developing parts of the world. But why aren't we engaging the private sector more to learn about the way they deal with bureaucracy and create agile internal systems? The simplification of processes is indispensable for UNHCR if we want to keep abreast with current trends that have already proved to be impactful across sectors. Through sharing knowledge and communicating promising practices, we can begin to look at influencing behaviours and mindsets.

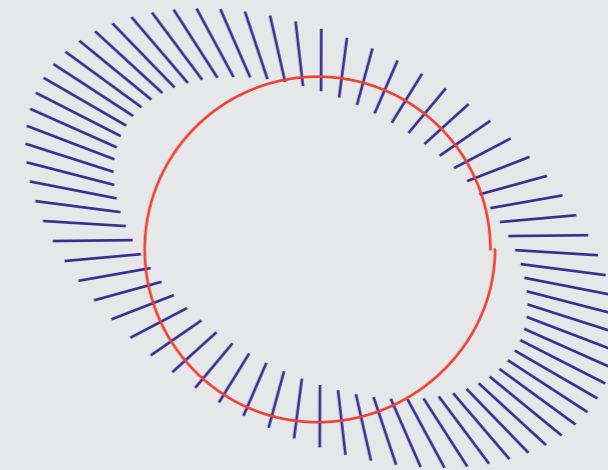
The truth of the (dark) matter is: individual change must occur for organisational change to proceed.

A new compass for innovation

We are not saying that you should drop all other innovation initiatives and focus solely on bureaucratic innovation. But we are saying that our work does not sit within a parallel universe, and ultimately for other innovation initiatives to be successful, we need to catch up. We must ensure that our internal processes can be one of the richest areas of growth for innovative ideas.

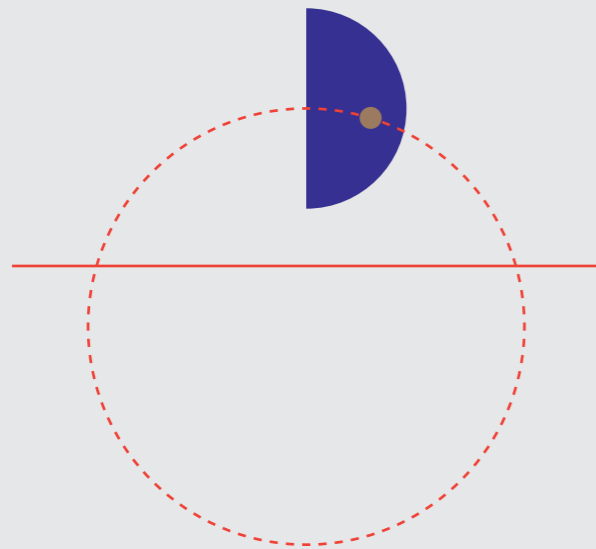
Innovation starts with a need – whether that's a new challenge or a call for renewal. Bureaucratic innovation will allow us to have a more systematic approach to change that is required for the future. Because in the end, we can't prepare UNHCR – or any organisation – for the future if we don't have the back-end processes and structures to support it.

The truth of the (dark) matter is:
individual change must occur for
organisational change to proceed.



The Void: Building trust for Artificial Intelligence in the humanitarian context

By Sofia Kyriazi, Artificial Intelligence Engineer



Do first impressions matter?

When I first arrived at UNHCR, snuggled in a small office in the basement, situated at the heart of a new team focused on the European refugee situation, I didn't necessarily believe that there was space for programmers to innovate within the organisation. While the team was rushing to collect the number of arrivals for the day through dozens of emails, amongst printed Excel sheets of data and coloured highlighters strewn across tables, I was perhaps naive in face of the challenges at UNHCR.

My impression was that even if this team was ready to integrate new ways of thinking about technology - how possibly could we change the mindsets of the dozens of colleagues on the frontline of an emergency collecting this data? We had colleagues in another team sending unstructured data through emails, partially because they were so overwhelmed, and partially because they didn't have time to rethink data processing. In those first few moments, I felt like a fish (okay maybe a whale) out of water.

Luckily, one of the immediate lessons I learned is that first impressions don't really matter. Through a small nudge, we were quickly able to move this data from heavy emails to a new automated approach for data collection and processing. When you're trying to change behaviours and ignite trust in something new, even the smallest win can be the start of something big.

As an Artificial Intelligence (AI) Engineer, I've realised one of the primary needs in creating change, specifically, as it relates to technical challenges, is making these challenges and the technology behind the possible solutions accessible and trusted. So what exactly is the difference between automation and AI? When you're creating a computer-oriented solution, the initial action is to automate collecting and transforming data - but that is just the beginning. You can have your solution executing a series of actions, to perform tasks that people used to perform and that is automation as well. Now when the actions are not trivial, and the tasks require more thinking (i.e. the detection of patterns),

machine learning can assist in processing large amounts of data and complex thinking, weighing and combining of models. In turn, you are modelling a real-world environment for the machine to resemble and teaching it how to make decisions. And that is Artificial Intelligence.

The first step to begin experimenting with data and testing an Artificial Intelligence theory (hypothesis) is the need to have data. At UNHCR, everyone is using data in their day-to-day work - even if they don't recognise it as "data" per se. The number of arrivals I mentioned previously? Data. Free text within surveys conducted with refugee communities? Data. Traditional humanitarian focus group recordings? Data. But to have interpretability of this data, it needs to be structured in a way that can allow for basic visualisation. We need to be able to play with the data, but in many instances, data isn't accessible to allow for this type of experimentation. More importantly for AI, you need the data to be structured so that it can be processed and analysed. In the end, it's not about just having the data (because there is a lot of it), but truly understanding how people treat their "data", what they do with their everyday tasks, what absorbs the most time in their processes, and what it is that they wished they knew, but don't. Any kind of activity that follows certain steps to achieve a goal - whether we recognise it or not - is a cognitive process. We process information, combine it with our knowledge, identify a pattern and make a decision, based on our reasoning.

There are different sides to this. There is potential in automating such processes, which is commonly associated with losing control over the process, or just semi-automating and still keeping ourselves part of the process to supervise the flow of the work, and adjust our role to the process or even the process can change to adapt to our needs. A fully automated process, is, for example, the redirection of some of the emails we receive to the "SPAM" folder on our email client. A semi-automated process would be the "writing assistants" that detect possible improvement on anything we type, but it is up to the human to approve of the suggestions or not. You could potentially change the process, add to it, evaluate historic decisions, and detect

additional information needs that would advance and optimise your workflow.

All this decision making requires a need more powerful for success than the data itself: trust. And people usually associate trust in AI with trust in the results. But what we are really talking about is trust in developing the AI solution with the engineers, trust in sharing the cognitive process, and participating in the design of the solution.

The alarm bell of negative positives

Science fiction has spent years preparing the world for the official takeover of Earth by robots. From movies to graphic novels to radio productions nearly a hundred years ago - there has been an association of the near-apocalypse with future technology. In general, people do not fear the true positives of Artificial

Intelligence. For example, a true positive in the case of cancer identification is, when a patient has cancer and the AI algorithm detects that this is a case of a patient that has cancer, therefore you have a true fact matching with the machine's classification.

overwhelm any pragmatic feelings one initially had to the technology. As Peter Haas, a robotics researcher who is afraid of robots, explains, "The machine never fails gracefully, and that is what is scary." Recently, we held the first Artificial Intelligence Workshop at UNHCR, where the team was presenting an AI solution to better screen applicants for our Division of Human Resources (HR). It did not take long for the fear of the false positive to manifest itself within the room. Almost instantly a colleague raised their hand eagerly, and stated that we "needed to be careful". Our colleague's reaction quickly skipped to two main points, with their hand still waved in the air: Artificial Intelligence will cost people their jobs and if there was ever to be a mistake in the screening process - UNHCR could end up paying large amounts of money to account for the machine's mistake. Despite the overwhelm-

ing evidence that the machine would not cost anyone their job, the trust still needed to be built strategically with our users. Additionally, the possibility of the false negative (the machine inaccurately screening one candidate) outweighed the thousands upon thousands of successfully screened candidates that would save UNHCR staff time and money.

Whether it's the humanitarian or private sector, people will readily welcome the accuracy and the predictions that will enable them to do their work better and more efficiently. And despite the endless true positives that Artificial Intelligence can bring, the one false positive will One missing piece of the puzzle in building trust around Artificial Intelligence is that behind every machine there are humans. If we look at a typical classification exercise where a machine

	True positive	True negative	Type I error False positive	Type II error False negative
Machine Diagnosis	✓	✗	✓	✗
Actual Condition	✓	✗	✗	✓

is classifying dogs and wolves, and the machine accidentally classifies a husky dog as a wolf, people will argue, "Well a human could make that mistake - they look so similar!" But in reality, our cognitive processes would place much more blame on the machine for this misclassification than it would a human. The machine is not human and it is playing the role of an expert. And we trust experts to simply not make mistakes. The wolf is fine enough and maybe misclassification won't affect anyone's life, but what if a human gets misclassified by a machine?

So, how does this translate to real life? The most severe case we wield in Artificial Intelligence theory is the case of cancer that was previously mentioned. The example being now that a machine misclassifies the type of cancer a patient has, and because of this false negative, their life is lost. This would be an absolute worst-case scenario.

What people miss in this process though is that the human expert - i.e. the doctor - is still included in this process and has the final say in classification, and AI can assist, not just to classify the patient, but to unravel the way the decision has been made, but the decision, in the end, is up to the doctor to make. That's their role, and the machine is there to just make their job a bit easier. This also is the same case for our solution that we're developing with our HR colleagues. The machine is merely acting as an assistant to the expert, and there is a marriage between the human and technical approach.

Everyone is afraid of mistakes

We don't want machines to make mistakes. And we also don't want humans to make mistakes. Even when your solution creates a false positive, we should not completely disregard a project because of trust. You expect and trust your car to get you from place A to place B. But if your car breaks down on the side of the road, you would repair it - and this approach should be utilised for AI solutions as well. We have to fine-tune our solutions and that requires humans in the process to detect mistakes, working hand-in-hand with AI Engineers and System Developers to "unravel the black box" of new

technology and rebuild the trust.

What we have discovered at the Innovation Service is also the important distinction between recognising the potential of Artificial Intelligence and trust. Ultimately, we cannot be speaking to people in the organisation if the AI solutions don't have an interest for the users they were created for, and are not strategically positioned - and communicated - for their needs. How can people identify the need for an innovative solution if they don't know what Artificial Intelligence can do for them and if they cannot recognise the need for a change in their processes? If we can frame our investment in the future of AI by recognising its potential, rather than full confidence in the machine itself, there is more opportunity to change mindsets and create value for users. This framing is the bridge that builds opportunities from potential to trust.

Investing in the potential of AI

Most people are fearful of change. Now combat that with new technology and we have a recipe for doubt. In reality, the majority of change as it relates to Artificial Intelligence has already been experimented on in other sectors and in the humanitarian context. And what's great about the work that is currently being done, is that collaboration lies at the heart of the innovative work being undertaken.

If we turn our heads to academia, there is an immense amount of work being done across labs and research groups amongst universities. Academia has already started to create diverse cohorts of professors, associates, and students from fields that have not previously worked together. In my Masters of Human Media Interaction, there were students from Cognitive Science, Computer Science, Psychology, Aeronautic Engineering, Designers and many more fields, that came together to define challenges and work with interdisciplinary concepts. These solutions included projects such as: emotion detection for storytelling where conversational agents adapt to the user's perception of the story that would then change the flow of information given to the user. An additional example could be creating a simulation for fire

training during a flight, where augmented reality tools (Engineers) go hand-in-hand with image recognition (Computer Science) features. For Artificial Intelligence to be successful, we need to work across disciplines to tackle the difficult questions surrounding ethics, moral philosophy, and prejudice in how we build our machines.

An example of how academia and the humanitarian sector are currently collaborating is a project from the Airbel Center at the International Rescue Committee (IRC) and Stanford University's Immigration Policy Lab. This project is a combined effort to optimise the resettlement of people in a new country, according to the market needs of the country of destination. The algorithm uses historical data on refugee demographics, local market conditions, individual preferences, and outcomes to generate predictions that suggest an ideal location for resettled refugees. This actionable information can then be harnessed to better inform decisions about where refugees are settled in the United States.

It is an extremely complicated project technically, but the concept itself is really simple. It derives from a need, the need to have resettlement conducted in the most productive way for society to benefit from arrivals to be integrated into the job market and to improve the quality of life and the dignity of people that are resettled. The IRC describes the algorithm as "part of a larger enterprise to revolutionise refugee resettlement, by harnessing private capital, data and volunteers to change the calculus for host countries in determining whether they resettle—and enable many more refugees to start a new life in a welcoming country".

Another example, housed within the Innovation Service, is the project I spoke about before for screening external candidates. We call this collaboration: Project Nero. Nero has an AI solution running in the back but in simple terms, it is a screening tool for UNHCR's recruiters to be able to reduce the time they spend on screening an applicant for a specific talent pool. Once the machine performs analysis on the characteristics of an applicant it labels the applicant and gives some indicators as to why they were

selected as good or bad. The concept again is very simple, and the need was there due to time and capacity limitations for UNHCR staff. But the real innovation here comes from people identifying the need (UNHCR's Division of Human Resources) for such a solution, to break the cycle of the repetitiveness processes to which recruiters are accustomed.

Create a pathway for harnessing the potential of AI in humanitarian innovation

We believe that resistance often is a lack of clarity. When it comes to the adoption of new technology, change lends itself to uncertainty. So what are the first steps to embracing the potential of AI in humanitarian innovation? These are a few actions you can already start taking to put out the flames of fear around Artificial Intelligence:

Collaborate with academia: There are already groups of people that need a higher motivation and purpose for what they are researching. Most of the projects in academia combined with market challenges find applications. There is a massive opportunity to not only collaborate but to drive and influence research in humanitarian contexts. Allowing academia to enter the humanitarian field more strategically, would be a union of forces.

Build an understanding that data is an asset: Often people don't even know they are dealing with data - because in our case, the data represents people, and within UNHCR there is often the belief that the processes being followed are so unique that out of the box solutions would not work properly. In the humanitarian context, we must not only attempt to bring these technologies into our organisation but to make these concepts accessible and jargon-free for people working across other departments. Once people understand the story that the data is telling, they can translate that into knowledge and furthermore detect opportunities rather than problems in their challenges.

Hire more data-driven people: I often get asked if the humanitarian sector is even ready for AI Engineers. Maybe it is a big step to jump

straight to AI Engineers in your team, but there is an obvious need to bring in people that combine knowledge from other fields and introduce a new expertise in a team. We need people who have an ease with experimentation and testing of theories using the data. This expertise can then be combined with people in-house who have the knowledge to interpret what the data means. By combining both strengths new ways of making decisions and measuring impact can be tested.

Bring in more data-driven processes: When it comes to decision making processes, data is essential. The more informed a decision is, the better the impact it can have. Since hundreds of decisions are made every day, wouldn't it be better to have at least data to justify why a decision was made, and measurements for the decision's impact so that in the future, we can also know what to expect? Experts know what to expect because they have experimented with decisions in the past, and that is knowledge that should be documented, along with the appropriate matching data and process knowledge that can be transferred to an AI solution.

Slowly build the trust through bright spots: In the above section, I highlighted a few bright spots of AI solutions that are already being tested in the humanitarian context. People don't necessarily want to be the first person to bring a completely new technology into their organisation - and luckily - it's likely you aren't. Even if you can't find examples in your own organisation, you can look to lessons learned from academia, the private sector, the public sector, and dozens of other fields that have already taken the first step. These are the stories you can use to build trust in experimenting with an AI solution. When we received the initial request to build an AI solution with our HR colleagues,

one of the catalysts in this collaboration was the market research they had already done in the private sector where these potential solutions were thriving. Find your bright spots and tell those stories to influence others.

I would be surprised to see UNHCR surviving as an organisation without integrating expertise from unconventional fields of sciences and arts. UNHCR now is not the same as it was, as the phenomenon of population flow is not as it was. Societies are technologically oriented, the power of receiving instant updates from the news

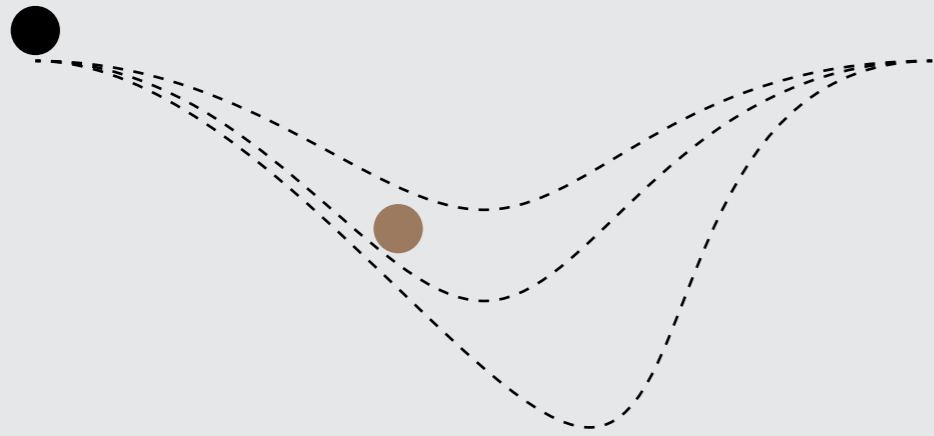
and the ability to virtually connect with each other has changed our communication. Humans may not have evolved much biologically in the past 100 years, but their needs have changed, and technology helped to achieve that.

At UNHCR, leaders can help integrate new and technical expertise. Management plays a great role in this, as to how they can form and accept a change in the team they are leading, a slow and steady restructure for the future. And since most managers would jump to find

people with experience in technologies to help them better deliver their services, I'd also urge you to think about diversity when seeking out these talents. Have in mind that this is a female AI engineer writing you this story, and we have a lot of ideas on how you can bring diversity into your AI solutions. Stay tuned, we're just getting started.

A quick note to say that we have deliberately left out the discussion of ethics and bias in Artificial Intelligence for this article. In a forthcoming editorial series, we will address the complexity surrounding these issues, how they interrelate and highlight some of the main challenges they present to how we collect and process data in the humanitarian context.

We don't want machines to make mistakes. And we also don't want humans to make mistakes. Even when your solution creates a false positive, we should not completely disregard a project because of trust. You expect and trust your car to get you from place A to place B. But if your car breaks down on the side of the road, you would repair it - and this approach should be utilised for AI solutions as well.



Revolutionising Recruitment: A test for AI in the United Nations

By Jennifer Brookland, Independent Writer

For UNHCR's Division of Human Resources (DHR), an idea to use Artificial Intelligence (AI) to assist with recruitment could end up revolutionising the recruitment processing, taking mere seconds to accomplish what currently takes staff members days or weeks. The machine assistance is part of a multi-step process to screen applicants in the agency's talent pools. Humans still, however, validate the machine process or outcome and handle the nuances of recruitment. For now.

With staff across the agency rotating every few years and external talent pools of thousands of hopeful hires across 29 categories, recruiters spend meaningful time on each posting sifting through interested applicants, qualified or still in the vetting process. At the start of 2018, recruiters at UNHCR's Affiliate Partnerships and Recruitment Section (APRS) were using various manually-intensive methods to screen candidates, methods both familiar and frustratingly slow.

An expedient way to comb through the masses proved elusive. Screening questions were

too easy, it seemed—applicants could figure out the expected answers and pass through to the next round, and that would not help. With the current Human Resources software, Peoplesoft v9.2, a solution wasn't coming fast enough, nor did it seem fit-for-purpose since maintaining a database of questions was also going to be time-consuming. At the same time, conversations were erupting around buying a separate system for applicant tracking or outsourcing to a 3rd party, but the associated costs and effort were a clear impetus to find another way. For Senior Business Analyst Netta Rankin, the issue at the heart of it was that her colleagues seemed to be massively labouring through their screening tasks.

"At the heart of it, I just like to help people and I don't like to see them suffering through their jobs if I can work with them to help find solutions," Rankin says. So, she set about doing something about it with her colleagues. This is her second time being involved in bringing new technology to UNHCR's Division of Human Resources.

Ten years earlier, when Rankin arrived as a consultant and then new IT Officer at UNHCR, she saw how recruiters manually sifted through candidates' applications. She was part of the team that brought the then-new PeopleSoft v8.9 system to UNHCR in 2005/6, and so she worked with the Recruitment colleagues to change things up and establish a new database format, based on which the Peoplesoft solution could be implemented as the main Human Resources (HR) tool.

Introducing the new PeopleSoft HR system and its various modules was not an easy sell at first. HR staff were used to their mainframe system. Some were convinced they did their job in a unique way that the software would not capture. They couldn't see how the new system would help. Rankin recalls being met with a lot of crossed arms.

"Some people were pretty upset actually," Rankin remembers. "We had resistance, and there was. Staff who were quite comfortable on the legacy system were unhappy about having

to be trained on something new. In the beginning, they only saw the things that their system did really well, and failed to see all the things it didn't do that the new system provided."

Eventually, when it came time to work on the Recruitment module, by 2009, recruiters were ready to try the new software. Rankin, with her background in consulting, has helped companies use technology to solve problems since the late 1980s. She's learned about getting people in conservative environments to accept tools they don't fully understand.

"Mostly you have to demonstrate what the benefit is for them, the users," she explains, saying pitching something new from the perspective of management or the organisation will leave staff uninspired. "You need to engage people doing day to day work and get them excited about it, and understand the benefits. You can't expect them to just happily get on board. It's about trying to find things that will make them feel good about receiving this change."

So a decade later, as the once-new software she'd led to install has become both entrenched and cumbersome in some ways, Rankin was excited to champion something new. She did not expect it to be something new to all of UNHCR. But a chance conversation with one of her colleague, Julia Schtivelman-Watt, DHR's Head of Assignments and Talent Mobilisation Service, led her to speak with Hans Park, a Strategic Design and Research Manager with UNHCR's Innovation Service, about the possibility of using Artificial Intelligence for recruitment.

A little disruption

"I thought innovation was just about coming up with new ideas, for example, tents or sanitation for our people of concern," Rankin says. And to her, AI meant something to do with robots. But as the conversation with Park progressed, she started thinking about all the ways AI and machine learning could work for her division. And nothing she brought up seemed beyond Park's imagination. "I was pretty excited about the fact that nothing I was saying was fazing him," Rankin says. "Everything seemed possible."

Focusing on the Affiliate Partnerships and Recruitment Section's screening tasks seemed like the right first place to see how AI could change things, according to Park. "We identified a challenge we could work on together that wasn't too difficult and wouldn't disrupt the existing system too much," he says.

They thought about the thousands of people on applicant lists and how they were currently being screened, with nine humans manually evaluating based on careful reading of the full application. Does Applicant A have the minimum requirements? She's still in the running. Does she have relevant experience? No. She's out.

"This processing seems rather linear, whereas with machines we have the luxury to work with a non-linear process of selection, meaning we can go back and forth checking data instantaneously as necessary, compared to how a human can work," says Park. It also takes hours, days or even weeks for a human to process thousands of applications. A machine can do full processing in two or three seconds.

So together with two other members of UNHCR's Innovation Service, Sofia Kyriazi and Rebecca Moreno Jimenez, the team built a system that takes in all the information from applicants' work experience and letters of interest, searching for terms and analysing language to pre-screen candidates who may fit a Talent Pool profile. Instead of spending days going through applications on a search for keywords, recruiters can spend more time in the other parts of the applicant vetting process.

With high turnover in the recruitment area of Human Resources, knowledge about how to evaluate candidates' experience and attributes repeatedly walked out the door and had to be built up again. The machine would be able to keep it, and build on it.

Conversations around the technology centred on more than just code. Park, Rankin and the recruiting team had to grapple with questions about bias, self-awareness, and ethics.

"How do we create trust in a machine?" Park says the team members questioned. "How do the recruiters trust that the machine is doing its job correctly? Are we looking into fairness? When humans shortlist candidates, how biased is it? And when a machine does it, can we eliminate those biases, or are we creating new areas where we are not fair?"

Rankin says the system is expected to offer consistency across recruiters, reduce potential mistakes with respect to screening candidates in vs out, and especially speed up that process. Before implementation, the system will be carefully tested, and the results will be validated on an ongoing basis even after it is live. The system works much like a human brain, a recruiters' brain that is, and so the team named it Nero to give it some form of humanness.

The cycle of scepticism

But Nero wasn't the object of immediate affection from some colleagues. Once again, Rankin found herself faced with scepticism from those uncomfortable with the idea of a machine making screening decisions.

For those recruiters who believed their jobs were too nuanced and experience-based to be entrusted to a machine, Rankin described how Nero gets "trained" just like a new recruiter would be, with plenty of input, and rules or guidelines on how to make decisions just as a human would.

"When a new recruiter joins the Division of Human Resources you have to explain what to look for," she says. "It's the same for a machine." She says the hard part was actually writing down what everyone is thinking as they go through that selection process. But there is a process. And therefore, it's a process that Nero can learn or imitate.

"I think now they understand that these machines aren't separate entities, they're trying to mimic what we do and just do it faster," Park says. "It's a challenge of communication, because it doesn't help that the machine just works," Park says. "People want to know how and why."

The team recognises that human biases could be programmed into the machine. If the implementation of Nero is done by a white North American male, for instance, keyword results could reflect his implicit bias or even spelling proclivities that would favour American turns of phrase and vocabulary.

"It's been interesting to be in these rooms and be discussing how philosophical questions become reality when they need to be hard wired into a system that impacts people," says Park. "We don't take it lightly. There's a lot of scepticism and we welcome it, and are constantly trying to improve the code and the application of it."

But the team working on Nero is focused on teaching the machine to operate with as little bias as possible. And Park thinks they've succeeded, for now.

Besides improving UNHCR's efficiency and speed in looking for the right talent of people to send on posts around the globe, Park says Nero will make recruitment more fair and inclusive. "That gets into the broader (hiring) goals of inclusion, diversity and gender equity," he says. That is the goal.

A new excitement

Future analysis will be helpful in identifying whether the machine is thinking more like a man, a woman, an African, a young person, et cetera. The team will also continue discussions about what to do if and when Nero makes a mistake- a conversation technology companies who are working on everything from driverless cars to facial recognition software, are also contending with.

"If someone loses trust in the system because it makes a mistake...will it be okay, because humans also make mistakes?" asks Park. "Or will expectations of machines be higher?"

Humans still verify Nero's results. At least, they do currently. "We call it pre-screening in fact because humans still manage the nuances," Rankin says. "They are not ready yet to fully trust their

Nero. Maybe one day we'll drop the human verification part, when we see it's trained so well it's never making a mistake. But we'll never leave it to evolve on its own."

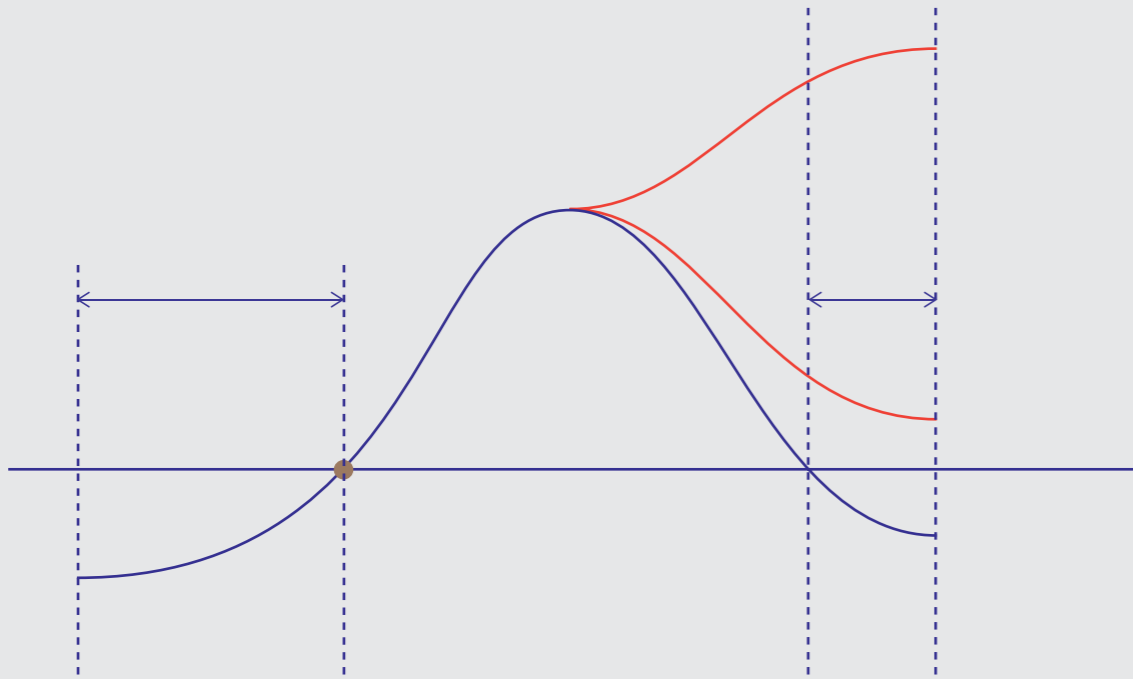
For now, they're excited to see how Nero does as it comes online for a pilot. Because the more recruiters use Nero, the smarter the machine gets. And as recruiters begin to rely on Nero to filter thousands of applicants, they'll be able to focus on the more human-centric aspects of their jobs.

Rankin hopes this boosts job satisfaction for the humans who work in DHR. As her work incorporating AI and machine learning expands, she's one example of a UNHCR employee with a renewed passion for her work, and a new awareness of what is possible.

"I feel a new excitement in my job," Rankin says. "I feel like I woke up to something that I wasn't aware of...I feel quite energised at this stage of my life that there's this whole other world that could revolutionise the way we work."

She also noticed that this time around, change came a bit more easily. It's a sign of culture change within the agency, that more people are willing to be uncomfortable in their jobs and courageous, as they try new things and test out ways to improve service. This time around with this AI initiative she wasn't pulling the team along but rather, working very collaboratively with the APRS team of recruiters, and the enthusiastic support of the Innovation Service.

"These days, people are questioning the way we do things, and looking for, and wanting technical solutions," Rankin says. "In many implementations I've done I often had the role of going out and convincing people to change. And now I feel that people are coming for change, and the machines are waiting for them with open arms."



Why innovation needs storytelling

By Lauren Parater,
Innovation Community and Content Manager

We see stories everywhere. We listen to stories, we tell stories - they are one of humanity's universals across cultures. We revolve around transmitting information and experiences, whether that is around a campfire, a table or an idea. Stories have the power to change our beliefs and behaviours, and they are one of the greatest tools we have for engaging audiences around complex issues such as climate change, migration and other social issues.

Stories get told, and retold, and therein shape society and mythologies around our identities. Sometimes these stories are simplified, rewritten or manipulated in such ways that they do not address the complex nature of what truly occurred. At the UN Refugee Agency (UNHCR), we see how the stories told around innovation have shaped the way colleagues perceive innovation in the humanitarian sector. The stories people tell about innovation shape how others understand and relate to it. The enduring mythologies of the Steve Jobs and Bill Gates of the world have left innovation to be interpreted as a privilege - privilege reserved for those in the ivory towers of Silicon Valley. As Hana Schank, a Public Interest Technology Fellow at the nonprofit think tank New America explains, "The story of innovation, as it is typically told, is one of rule breakers, stay-up-all-nighters, people who are sharper and shinier than everyone else—whiz kids. And those whiz kids all look the same. Young. Male. Techies or policy wonks or numbers geniuses."

The greatest innovators at UNHCR challenge this stereotype but the stories that have proliferated across the organisation have embedded and nurtured this unoriginal caricature. And those who benefit from this single story have told it over and over again for their own benefit. Fortunately, master narratives can be countered - and innovation is the perfect avenue to understand how stories can build support, persuade, and challenge the notion of who gets to be an innovator.

Our brains on stories

Why do our brains love stories so much? Scientists have discovered that a good story

lights up your brain in the same way pleasure does. As we follow the emotionally charged events of a story, the popular compound oxytocin rewards us for continuing along the journey. Stories have the ability to excite the neurons that make dopamine and stimulate the creation of oxytocin - the chemical that promotes prosocial, empathetic behaviour. Neuroscientist Uri Hasson argues that "a story is the only way to activate parts in the brain so that a listener turns the story into their own idea and experience."

Steven Pinker, a Harvard University psychologist, argues that stories are powerful tools for both learning and the development of relationships with others. Storytelling has played a key role in social cohesion between groups and is a particular form of communication for passing information through generations. Pinker argues that there are neurological roots tied to social cognition not only for telling tales but also the science behind why we enjoy them. The oxytocin we derive from stories helps us care and feel connected to others - whether we like it or not.

Psychologists have also discovered that stories have the ability to transport us into the world of narrative and they are inherently more effective at changing beliefs and behaviours than facts are. For the cognitive benefits to have an effect though, you have to be telling a story that actually compels the reader to engage in this distinct mental process. Do you have a coherent plot? Do you have a story arc? Are there characters? Are the characters engaging? All of these things help to make a good story and therein, make your story more effective.

Making innovation inclusive and accessible

So, you might stay up all night curled up with your favourite book because your brain loves a good story - but how does this relate to innovation?

Within your organisation, storytelling can act as a carrier for messages, assist in reinforcing cultural values or transform into a powerful persuasive tool.

There is extensive research on the benefits of organisational storytelling, as sociologist Yiannis Gabriel notes, “Organisation and management studies, no less than consumer studies, cultural studies, media and communication studies, oral history, as well as substantial segments of legal studies, accounting, and studies of the professions and science, have enthusiastically adopted the idea that, in creating a meaningful universe, people resort to stories....stories make experience meaningful, stories connect us with one another; stories make the characters come alive, stories provide an opportunity for a renewed sense of organisational community.”

At UNHCR, storytelling is a critical tool for making innovation accessible to our colleagues, developing a shared understanding of innovation, and creating a path for organisational change. More importantly, storytelling can help colleagues imagine themselves in similar experiences to the people who are already innovating, and therefore, build empathy for a character they may not have otherwise related to.

How to use stories as a strategic tool

For me, the wonderful thing about stories is that they are not only powerful cognitive tools but they can be malleable based on your challenges and how you want to create change within your organisation. Organisational stories can be used to persuade, educate, reassure, inform, explain, connect, construct meaning, or simplify.

1. Stories to transport messages or vision:

We use stories to help illustrate our innovation process through emotive and authentic stories that not only help contextualise our mission and values but generate a common understanding of what innovation is and who gets to be an innovator at UNHCR. These stories are critical for changing the culture of the organisation and familiarising people with a vivid vision of innovation. We’ve written stories such as “Why innovators can come from all parts of the organisation” to persuade others in UNHCR that regardless of where you sit in the organisation - you too can be an innovator if you have the right mindset. Stories of persuasion such as “Innovation

is about diversity and inclusion. Stop with the gimmicks, catch up.” are disseminated to influence beliefs around innovation and to transport our vision of diversity to the centre of innovation initiatives. Creating a compelling vision is a key element for sustainable innovation across an organisation - your vision needs to energise and compel others to move and act. Stories of innovation allow us to create this shared vision and common understanding to introduce positive change.

2. Stories to diffuse or pitch ideas:

People love ideas, and innovators have many tools to prototype their novel products, services or processes. Storytelling offers a key framework to emotionally connect with your audience or decision makers. Instead of developing a Powerpoint presentation, create a story around your idea that people will yearn to retell. Move beyond a basic pitch and see how you can utilise the science of story-building to make your idea resonate and more memorable for your target audience.

3. Stories to capture bright spots:

At UNHCR we talk a lot about bright spots. For us, bright spots are the people who are on the frontline innovating - we exist to support them. Telling stories of others in the organisation who are innovating can not only help people overcome anxieties and concern about various attributes of the innovation process. But it can make innovation more accessible. For example, we wrote a story about an Innovation Fellow in Zimbabwe who was experimenting with methods to bring refugee voices into our programmatic cycle, giving us a direct line of feedback into what was and what was not working for their community. Another colleague based in Turkey discovered this story and explained, “When I read this story about innovation, it was the first time that I felt like it was relevant to my work and something that we should all be incorporating into our day-to-day protection work.” She then applied for the Innovation Fellowship and we welcomed her into our 2018 cohort. Storytelling is key for building understanding and engagement for innovation across UNHCR.

4. Stories as a road map for behaviour change:

At the Innovation Service, we believe that strategic communications can be used to not only build support for innovation but also to change behaviours at a cultural level. Often, resistance to change is simply a lack of understanding for how to change. Innovation and experimentation can walk in lockstep with uncertainty, and with uncertainty comes ambiguity. We can use stories to script behaviours and create a pathway for innovation that is accessible for colleagues who may not know where to start. If you want to create an organisation that breeds innovators, it is not enough to tell them “be innovative” or “be creative.” Through detailed stories, we can tell them how they cultivate change. For example, UNHCR Brazil has done an excellent job creating a culture for innovation within their operation. In the previous cohort of UNHCR’s Innovation Fellows, three of the accepted twenty-five person cohort came from the operation during the height of its innovation activities. This was something we knew we needed to capture so other UNHCR operations could learn from their experience. We documented the behaviours and actions of Senior Management to Protection Officers to understand how we could script the critical moves through storytelling. Through telling the story of why innovation took office in UNHCR’s Brazil operation, we’re confident it will create a pathway for other offices to recreate their recipe for creativity. Stories can inspire others to learn more, do more and take the road less travelled.

5. Stories to build knowledge and educate:

What we’ve seen at UNHCR is that innovation is not always accessible to our 15,000 colleagues across the world. Storytelling is an extremely valuable tool to challenge the notion that innovation is only technology, and to build knowledge about what the innovation process looks like in practise. Instead of relying simply on facts, we’ve used a story of a young refugee in Tindouf, Algeria who built a new shelter structure out of water bottles to illustrate that innovation can come in all forms based on the needs of a community. Stories also allow us to capture lessons learned around experimenting

at UNHCR and how to build knowledge around what works and what doesn’t. Ultimately, our learning has greater value when we share it and reading a humanitarian innovation story is more inspirational than another report.

6. Stories to understand the past:

Innovation is rarely straightforward, and a lack of institutional memory can reinforce the status-quo. Through storytelling, we can capture the long-dormant seeds of innovation’s past and guide others through the trials and tribulations of the innovators who came before us. If people in the humanitarian sector don’t see how much has already changed, they can fall into the trap of believing that they can’t challenge current norms. If we look at the evolution of cash-based interventions in displaced communities, we can clearly see how willing the sector is to adapt to the standard way of working. Additionally, cash-based interventions have challenged how the humanitarian sector thinks about dignity and the power of choice for refugee communities.

7. Stories to explore the future or the unknown:

Science fiction creates pictures of what the future can be by inviting us to climb into the story and explore the future before it happens. Star Trek is a great example of science fiction inspiring future technological innovations - the Star Trek “Hello Computer” long preceded Apple’s Siri or wireless headsets. There is an essay written in 1945 by Vannevar Bush where he envisions what we now call a personal computer. This extraordinarily prophetic essay imagines not only new technology but the relationship we will have with the information and knowledge it keeps, and with one another. Stories allow us to gaze into what our future could look like, and the norms and beliefs pulsing through it. What would the culture of UNHCR look like if every Senior Manager created space for staff to innovate? In the article, “Why cultural change has to accompany our renewed investment in data” Chris Earney, the Head of the Innovation Service, imagines UNHCR as a more agile and efficient organisation at the forefront of proactive, evidence-based humanitarian response. The story of what this culture could look like

and why it matters to refugees is supported by clear actions to reimagine that future together. We can also use storytelling to take a sociocultural approach to working with communities to create alternative futures where they are the decision makers. We may not be able to predict the future but this branch of storytelling enables us to extrapolate and forecast a rich connected picture of possibilities for innovation.

But storytelling also needs innovation

So now you're convinced - storytelling is a key tool for driving innovation. But I believe we need to go beyond the stories that are being told now. The stories we are telling also need innovation.

While in some cases people may not understand how innovation relates to their work, in other instances people simply don't believe they can be an innovator. To change our organisational culture at UNHCR we need to question the paradigm of who gets to be an innovator. We have to tell stories to steward our culture forward. We have to tell stories to demystify the role of creativity and innovation in people's day-to-day lives. This experience of creativity has historically not been accessible to the many because someone once spoke of its false innateness. We have to tell stories that value the virtue of inquisitiveness and reward the merit of curiosity. There are too many people cast out from the innovation conversation before they can contribute to it because they are expected to be in some way special or original. The false shadow of the lone inventor frightens people outside the creative experience. We have to tell stories that depict creativity as accessible and curiosity as a friend we can always revisit.

We also have to recognise the cultural variations in what people expect to see in stories - how can we use innovation to speak across cultures whether that is through speech, gestures, or drawing stories.

We need to tell better stories. We need to tell more inclusive stories. We need to tell stories about the intersectional spaces, the complexity of systems and the nuances of the human

experience. We need to question who has been telling our innovation stories and why. We need to question who is telling the refugee story and how they are benefiting from controlling this narrative. We need to understand the power dynamic of storytelling and more importantly, who has a voice at the table when we're talking about innovation.

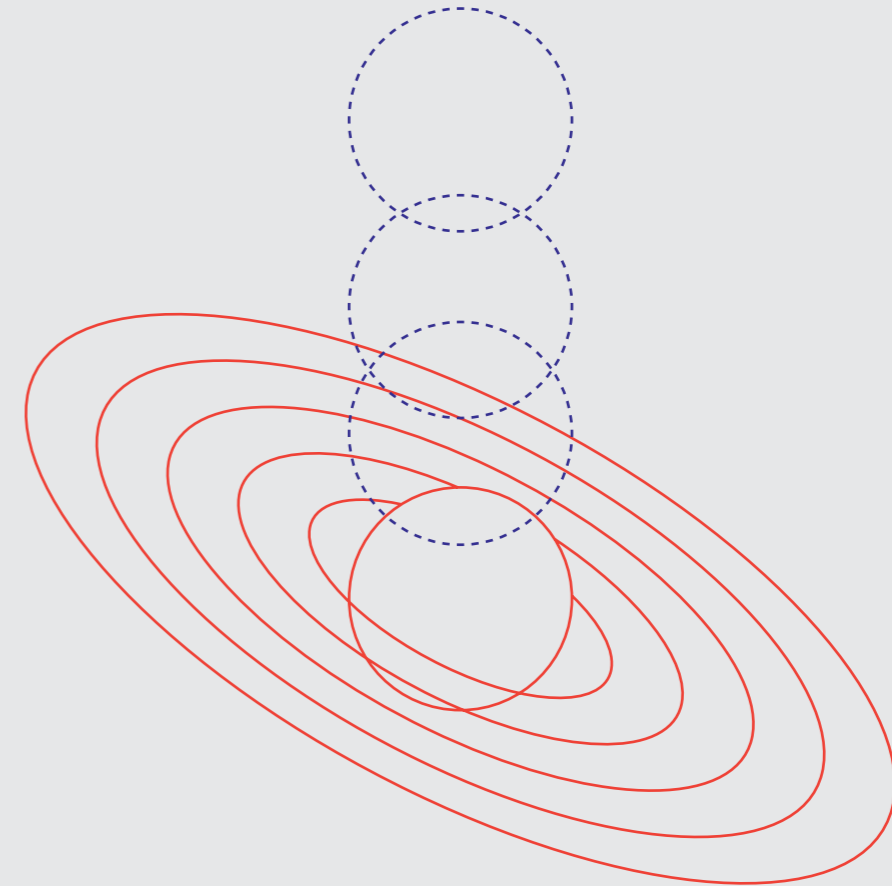
We can't have a single story of innovation. We can't limit ourselves to one story structure, one face or one voice. We can't allow the cliches or stereotypes to filter our stories for so long that they become the perceived norm. We have to build stories of failure alongside our journeys of success. We need stories that move us towards each other, not farther apart. We need stories that not only set new standards but challenge us to live up to them.

We need stories of innovators as diverse as the world we inhabit. We need, we crave, a thousand different stories on how innovation can improve our organisation and the lives of displaced communities. Storytelling and innovation should exist symbiotically. They can be mutually beneficial to one another in the desired future we wish to build. Instead of an afterthought, let's bring innovation to the forefront of how these stories are being told - in their most complex yet accessible versions.

As author Maria Popova so eloquently states,

"A great story, then, is not about providing information, though it can certainly inform — a great story invites an expansion of understanding, a self-transcendence. More than that, it plants the seed for it and makes it impossible to do anything but grow a new understanding — of the world, of our place in it, of ourselves, of some subtle or monumental aspect of existence."

So yes, innovation needs storytelling, but I would argue that storytelling needs innovation just a little bit more.



Through storytelling, we can capture the long-dormant seeds of innovation's past and guide others through the trials and tribulations of the innovators who came before us. If people in the humanitarian sector don't see how much has already changed, they can fall into the trap of believing that they can't challenge current norms.



Why community-led innovation is fuelled by risk, ambition, and experimentation

By Peter Batali,
Co-Founder and Executive Director of
Community Technology Empowerment Network (CTEN)

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UNHCR's Innovation Service has worked with Community Technology Empowerment Network (CTEN) since early 2017 through providing support to the Refugee Information Centre (RIC) in Rhino Camp Settlement, brokering new technology partnerships and providing guidance and documentation of their successes and learnings. Over the past two years, we have worked on a number of initiatives together, including research into the ethics of humanitarian innovation and UNHCR's 2018 Innovation Award. We've definitely learned a lot through this partnership - this article is one of our latest joint-experiments, we hope you enjoy it.

It was absolute chaos. Some 9,000 people travelled over rough terrain strewn with massive, muddy potholes -- riding in trucks, sharing cars, and taxis. Some were even walking, carrying everything they could with them. After their long, tiring trip, they safely arrived in Uganda and were settled in what would become their new home. Everyone had to construct their own shelter on the piece of land they were allocated. Most of it was covered with shrubs, so they had to clear it before they could begin constructing on it using poles, ropes, and plastic sheeting to protect them from the heat and rain. Those who arrived late in the afternoon had to wait until the next day before they could start building their shelters. Some built into the night, and those who weren't strong enough to do it for themselves had to ask others to help. Everyone received a hot meal those first few days, but then had to think about how they would cook the dry rations they were given thereafter. For many, there were notable language barriers as they tried to find their bearings and figure out what would happen next. The scene sounded like hundreds of radios all playing different songs at the same time.

I was lucky enough to have my wife and children with me, and I was later joined by my mother and siblings. But many people were worried sick about loved ones they had left behind. Like my buddy Joseph -- who had seen his brother captured by armed men before he fled, fearing for his own life -- many were separated from their friends and families as they ran to safety. Isaac, another friend of mine, escaped to

Uganda but was forced to leave both of his elderly parents behind. There wasn't much information coming through from South Sudan, and everyone worried about the fate of those who hadn't yet safely made it across the Uganda-South Sudan border. The settlements lacked electricity and the telecommunications network signal was poor, so even for those who had fled with smartphones, laptops and other communication devices, staying in touch with anyone outside the settlement was a real challenge.

In the midst of all this, I had an idea that kept ringing in my head like a bell, a way to help people stay connected and get the information they needed about their loved ones. I had fled with an old creaky Toshiba laptop that I later nicknamed "Grandma," but it had a battery so weak it wouldn't hold a charge. I knew what we needed was a generator.

So I dropped what I was doing and caught a ride in an overcrowded car to Arua town, a busy business centre situated about 52 kilometres from where we had camped. Once I made it there, I bought six iron sheets, roofing nails, some fuel, speakers, a microphone -- and, most important, a portable generator. I hired a pickup truck, loaded in the supplies I'd just bought with my own resources, and returned to the settlement where my family was waiting for me.

They thought I'd lost my mind. "How could you spend money on this right now?" they asked. Helping them understand what I was trying to do was not easy, but I was determined to restore hope in the community and make everyone feel less helpless. I believed deeply in my idea.

We could be heroes

When I was a little boy, I once saw a ripe, juicy-looking mango on a tree near where I lived. Even though my mother cautioned me not to because it was dangerous, I climbed the tree to fetch the mango. Of course, I fell out of the tree and dislocated my left arm, but that didn't change the part of me that will always go for something I want. After all, I still got the mango.

My family acknowledges this bit about me, and we understood quite well the situation we found ourselves in. We were refugees, just like everyone else. We were setting up temporary structures in Rhino Camp settlement, and the construction materials we needed were provided to us by humanitarian aid groups with support from the UN Refugee Agency (UNHCR).

This wasn't my first time in such a situation. I had lived in Uganda as a refugee for close to ten years after the Sudan War erupted in 1992. When I finally returned to Sudan, I was so full of hope when people from the predominantly Christian South voted overwhelmingly to separate from the Arab-controlled North. I sought to give people in my hometown a way to envision and create a new future, so I started the Community Technology Empowerment Network (CTEN) in 2012 in Yei town, South Sudan. As its founder and Executive Director, I have always been passionate about using technology to improve and promote access to information. At one point, we had up to ten staff and volunteers working with CTEN in Yei. Some worked in the secretarial services bureau, while others were computer instructors and community sensitisation project personnel.

But in July 2016, South Sudan descended into chaos, when the people who had so triumphantly participated in forming the world's youngest nation just a few years earlier began aggressively fighting and killing each other. The violence that erupted once again sent thousands of refugees fleeing into neighbouring Uganda, including me, my family and "Grandma," the laptop I'd been using since I established CTEN-Uganda. We found ourselves uprooted from our peaceful homes in South Sudan and living deep inside Rhino Camp refugee settlement.

Everyone felt the pain of being separated from their families, with no way of knowing if they were dead or alive. We all had shelter and food thanks to UNHCR and other humanitarian aid

agencies, but there was anxiety in the hearts and faces of many refugees about the fate of their loved ones, not only back in South Sudan but also within the borders of Uganda. One way to ease these fears would be to give them knowledge and a means to connect with their families.

I also believed I could use CTEN to raise awareness on important issues and encourage peaceful living not just within the refugee community, but also among the hosts. Still, my family thought I could not be serious about my idea to establish CTEN in Uganda. Many people in the settlement looked at me in disbelief. They're busy putting up tents made of plastic sheets and here I was, spending scarce resources on supplies and equipment. I knew I had to balance what I needed to do for my family and what I wanted to do for the community. I explained to my family that I was actually investing in the future. A refrain kept playing over and over in my head:

"Please work, please work, please work."

The idea of initiating CTEN-Uganda was not mine alone. Not long after I arrived in Uganda, I reconnected with Taban James Radento, an old friend who lived nearby. We knew each other from Yei town where we had worked together at CTEN. Together, we figured out what to do about our new situation: Create a centre

where refugees can share ideas, experiences and information, and interrelate in peaceful and resourceful ways. Instead of the youth spending most of their time consuming cheap alcohol and smoking tobacco and marijuana to escape from their new and difficult reality, we could use the Refugee Information Centre (RIC) we would create to teach them about computers and the Internet. We could help them learn how to interact with the outside world through email and social media – building on what we had done with CTEN in South Sudan. A very important part of this would be helping people find and connect with their loved ones, wherever they might be.

On the day I returned from Arua with the supplies, James and I ran the generator and set up the speakers. We detected an MTN Uganda network signal in the area and dialled in our modem. The signal was patchy but it worked. As soon as the generator started running, we began playing danceable music from various musicians familiar to members of the community – like WJ De King and Silver X from South Sudan and Jose Chameleone, Bobi Wine, and Bebe Cool from Uganda. We mostly chose music that would lift people's spirits. The noise from the generator and the loud music quickly attracted a crowd. I asked those with electronic devices to bring them for recharging.

Those with smartphones and laptops were excited to access the Internet. James and I helped open email accounts for those who didn't have one. We showed them how to search the web for information, including how to find and connect with family and friends online. Within a few weeks, youth were accessing social media and entertainment sites, while students who had enrolled in long-distance study programmes used the web to do research. Staff of humanitarian aid agencies who lived and worked in the area used the Internet link we had set up to send emails and submit reports.

Within a fortnight we were offering basic computer lectures to youth in an accessible UNHCR tent, with permission from the local leadership. I still had "Grandma" with me – she was running pretty slow but strong enough to deliver training in basic computer concepts, like how to access the Internet and use the Microsoft Office applications suite. The turnout was overwhelming. People of all ages, including children, poured into the tent. Some of them kindly let us use their personal laptops during the computer classes.

James and I recognised that momentum was building for what we had created here, but we often ran out of money to buy fuel and subscribe to Internet data. Even though we used Facebook to lobby for support from as far away as Europe, Australia, and the United States, the funds we received weren't enough. There was a time we had to stop the computer lectures

altogether because we lacked resources. About a month into the training, we had to leave Rhino Camp settlement and relocate to Arua town so we could write a project proposal to raise funds to support the RIC initiative.

I get by with a little help from my friends

A few months earlier, I had reconnected with my good friend Ajoma Christopher, who I first met in the late 1990s while studying at St. Joseph's College Ombaci, an all-boys school located about four kilometres from Arua town. Chris, who is Ugandan, had come to the settlement in August 2016 to see how he could help at the RIC. I was very happy to see him!

Chris and I first connected as teenagers over our shared love for high-tempo Congolese music. Every weekend, we would attend what we called bull dances, which the college administration organised for students inside the school's assembly hall. The dancing was usually spirited and good for burning off excess energy. Chris and I both studied metalwork and technical drawing, and today we both love working with computers. We were close friends in college and had quite a few adventures!

When we met again in 2016, Chris was working as a self-employed computer repair technician and Information and Communication Technologies trainer. He was always good at both written and spoken English, and however hard I tried to beat him on the subject, he always came out on top. In fact, he helped me write this story. On the other hand, I was always good at mathematics and had taken a management course with the hope of starting my own business. To make CTEN-Uganda a reality, I realised we needed the best of both our minds.

I asked Chris to join our effort and, because, as he said, "refugees were looking for some sort of hope," he enthusiastically agreed to help write the proposal we submitted in October 2016. Even though he was often busy with his freelance work, he continued to pitch in wherever he could to package and promote the RIC and shape it into what we knew it could be. Chris and I are a good team, because I have been

known to just run with an idea without thinking it all the way through first, kind of like I did with the mango. Chris will give me a look that tells me to slow down when I get excited and helps us take a more pragmatic approach to things. We complement each other pretty well and are good at making plans together.

I was determined to develop CTEN-Uganda into a stable, self-sustaining refugee-led organisation, and although many challenges still remained, we kept moving forward. Using funds from individuals and well-wishers, we built a temporary office at the RIC, which was when we first interacted with UNHCR, through a group of their field staff that had come to monitor UNHCR-funded projects in the area. The banner that read “Refugee Information Centre (RIC) by CTEN” and the refugee youth constructing the structure caught their eye, so they stopped to ask what was happening. I explained to them what the RIC was all about and they were impressed, especially because we had taken the initiative as refugees to find solutions to some of the challenges that we were facing. Before they left, they asked me to write a concept note for the RIC -- the first step toward getting funding.

You’ve got to work hard

But for the time being, we still depended on contributions from individuals and groups in Uganda and abroad. None of the volunteers were getting paid for the sacrifices they made: working in difficult weather conditions — especially during rainy and dry seasons with strong dusty winds that destroy temporary shelters — often in darkness in an area where scorpions and snakes roam freely. Like me, they were spending what little resources they had on the RIC. This situation created conflict, forcing us to make difficult decisions between supporting our families and promoting the innovation we believed in.

We needed to raise funds, which meant getting the attention of people who could help us. Because I had always loved athletics, I developed the idea of organising a refugee road run event to publicise CTEN-Uganda and the RIC initiative. About 200 refugees participated in the

road run, and they contributed to the community by cleaning the road they ran on. They also helped paint a life-saving zebra-crossing near Arua primary school, along the route to several refugee settlements including Rhino Camp, Imvepi and Bidibidi. The accidents around that area have noticeably reduced as a result. CTEN used the event to raise awareness on the refugee situation and described how it is necessary for everyone to collaborate in order to improve the welfare of refugees, not just in the Northwestern region of Uganda but across the entire country. It was a delightful way to show that we care about our new home and promoted the idea of peaceful coexistence among refugees and the local community.

The event helped us make progress, because other organisations started appreciating what a refugee-led organisation could do — we captured people’s attention. They could see that if we just had a little bit more support, our multi-purpose RIC could have a much greater social impact.

In January 2017, CTEN was invited to attend a Great Lakes Initiative conference in Uganda’s capital city, Kampala. At the end of the three-day conference, CTEN had received a donation of three Lenovo laptops and a projector.

Three months later, the RIC welcomed a team from the UNHCR’s Innovation Service in Geneva, which had heard about our initiative and wanted to learn more. During their visit, they donated a number of mobile devices including smartphones, tablets, and modems. They also gave us a solar power system and 100GB worth of Internet data. It was an amazing moment for all of us! Just what we needed.

Around this same time, UNHCR and the Office of the Prime Minister (OPM), the government unit responsible for the welfare of all refugees and asylum seekers in Uganda, invited us to attend their monthly interagency coordination meetings with other partners operating in the humanitarian sector. Plus, in September 2017 UNHCR officially made us their partner on mass information dissemination and mobilisation, a status we still hold and are most proud of today.

Dreams do come true

I believe the world cannot develop without innovation. It’s through innovators and experimenters that growth happens. The key to that is the environment that enables the innovation, and I’m very happy that UNHCR and all the individuals that have supported CTEN helped promote this idea.

Look where we are today: CTEN is an implementing partner to UNHCR, executing mass information awareness and mobilisation activities in the refugee settlements of Bidibidi, Imvepi, and Rhino Camp. It currently employs 17 individuals, excluding volunteers and interns. The information we disseminate to the target communities is cross-cutting in nature and includes the sectors of education, livelihoods, health, sanitation, food, and sexual violence prevention, as well as raising awareness on the spread of malaria, hepatitis, HIV, and Ebola. The RIC in Rhino Camp settlement offers free Internet access to both refugee and host community youth thanks to a partnership between NetHope, Cisco, and Airtel Uganda. In addition to accessing social media, the youth use the Internet to study free online courses on educational websites, like Alison and Coursera. CTEN has also partnered with Canada-based Eminus Academy to have up to 15 youth study an online course in social entrepreneurship at the RIC.

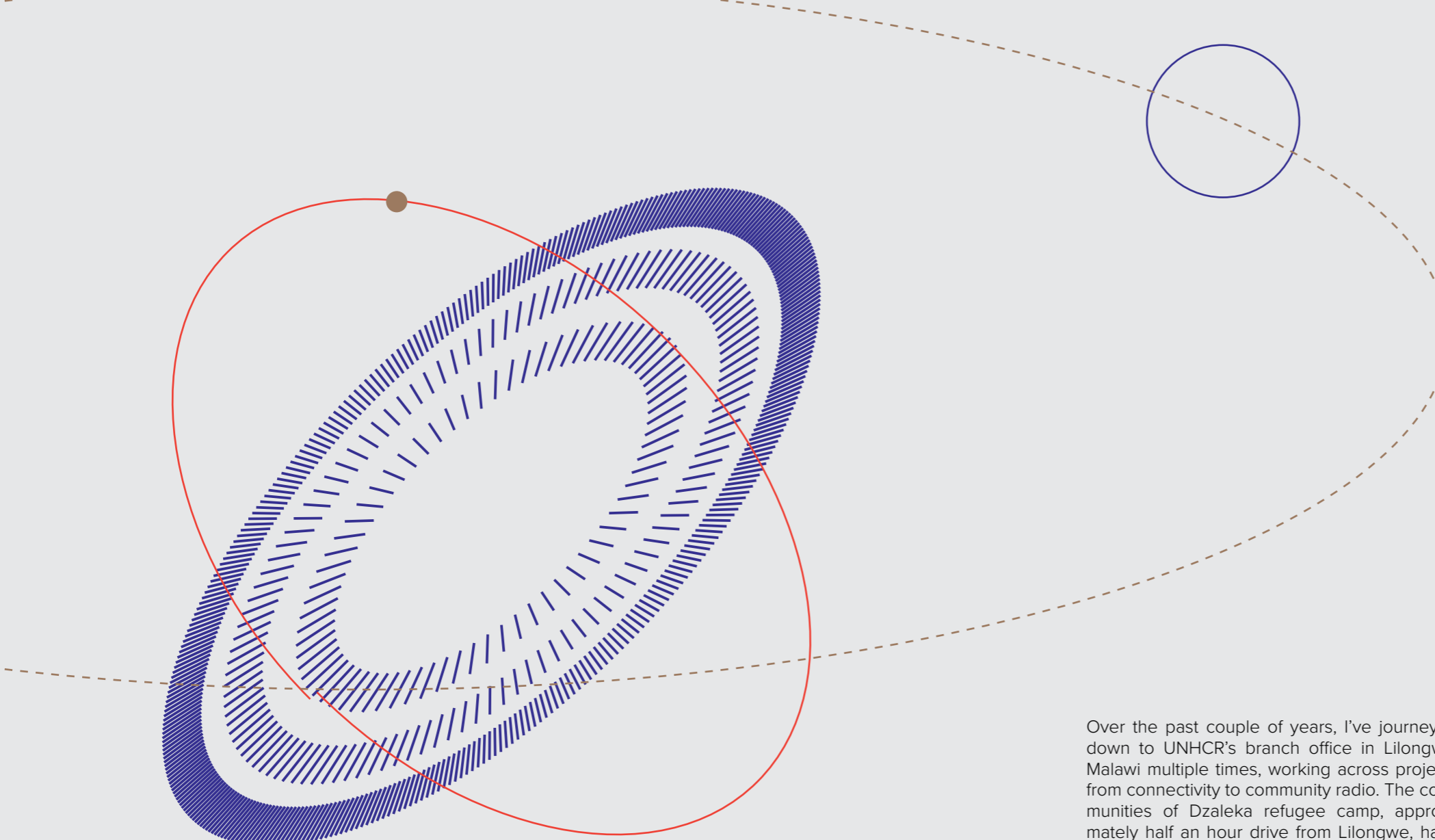
CTEN has continued to grow and is on the path to becoming a stable organisation through creating and maintaining strong relationships with community members, the South Sudanese diaspora, OPM, UNHCR, and its implementing partners. None of this would have been possible without the support and dedication of the team — James, Chris, and many others. Our families are now in full support of our effort, even when we have to work late. There’s no longer any doubt about what we are doing and hearing them say they believe in us is like sweet, soft music to our ears.

Refugee-led innovation is very important to humanitarian responses all over the world. It’s important to listen to the ideas that refugees have from their experience, then focus more on building up their capacity. That way, refugees take

ownership of the projects the humanitarian organisation starts. They will look after everything well because they introduced the idea.

We’re very proud of where we are now. There were moments within those very fast early months when we had challenges, but because of my past experience I believed it was possible — I knew there was something sweet there. I refer to the mango. I went for it! I believe the fruits of the work we did will really develop that community and the rest of the world, by giving people the chance to contribute to their community, no matter where they come from or where they are.

I believe the world cannot develop without innovation. It’s through innovators and experimenters that growth happens. The key to that is the environment that enables the innovation, and I’m very happy that UNHCR and all the individuals that have supported CTEN helped promote this idea.



The epochal mission of local innovators

By John Warnes,
Innovation Officer

Over the past couple of years, I've journeyed down to UNHCR's branch office in Lilongwe, Malawi multiple times, working across projects from connectivity to community radio. The communities of Dzaleka refugee camp, approximately half an hour drive from Lilongwe, have been learning to create mobile apps and finally received their licences to broadcast radio last year. More and more young refugees are aiming to undertake tertiary education courses as part of the promise education brings for a brighter future.

While there are a lot of young people taking up the courses, one of the most striking things to consider is how it all got started. Getting community buy-in and ownership is something of a holy grail for humanitarians looking to build out forward-thinking programmes with communities, particularly those that leverage new or even old technology. In the case of Malawi, and countless others, it was primarily down to a small number

of individuals; the aficionados. I'd define these aficionados as innovators who have been using technology in new and creative ways to support themselves and their community. These innovators are on their own epochal mission that I liken to the spacecraft known as Voyager 2 that recently crossed the neighbourhood of our solar system. The aficionados are extending exploration outside the known and this matters because it influences people beyond the small group who actually do it. They're the ones at the edge of what a community is and bringing in new experiences, ideas, and technology that will make it evolve.

Sometimes technology gets singled out or siloed into something separate for the mainstay of society but actually, it is part of a broader technology adoption lifecycle¹, originally documented in Everret Roger's diffusion of innovations theory². This theory outlines how new technologies get adopted by communities organically, with a small group of early adopters leading the way before broader adoption takes hold. For instance, at one point in the distant past - the wheel - was literally ground-breaking technology. Do you think the organisations of the day had bureaucratic hurdles to overcome in getting people using wheels? Were there dedicated wheel divisions or teams promoting the use of wheels? Unlikely. Rather there would have been a group of people who were the first to try and understand its relevance, and adopt it before it became mainstream, and champion it beyond.

Another example of aficionados and the important role they play would be for instance those who were investing time and effort on the internet prior to the dotcom bubble. They have become the founders of some of the biggest technology companies in the world, like Zuckerberg of Facebook or Brin/Page of Google, now Alphabet. Or at the very least will have led the way in their communities evolving around these new technologies.

¹ https://en.wikipedia.org/wiki/Technology_adoption_life_cycle

² Beal, George M., Everett M. Rogers, and Joe M. Bohlen (1957) "Validity of the concept of stages in the adoption process." *Rural Sociology*22(2):166-168

This same diffusion theory applies across all societies, including refugee communities. Taking some terminology from Roger's process, just like in any society there are a small number of refugees who have grown up with some of this technology, and whose curiosity has led them to experiment, explore and share. They are leading their communities in a society evolving to a dramatic technological shift that will bring them into the digital era and in time through the fourth industrial revolution and beyond.

Take Remy for instance, a refugee at Dzaleka camp in Malawi, whose story has been documented on the UNHCR web portal³. The way that technology has impacted his world is paralleled much of mine (given my job and area of work no surprise that I began my internet life in the dial-up age rocking Netscape Navigator as my browser in the mid-90s). Remy is boosting his own knowledge and skills through his TakenoLab endeavour, which teaches coding to the community and provides avenues for them engaging with technology. He is supporting his community and filling life with things important to him through his engagement with technology.

Remy isn't the only one. These aficionados exist in every community, and what is most fascinating is that their approaches, and activities no matter how few or small, often set the stage for more widespread adoption and advancement of technologies amongst populations for years to come.

All of this is also mirrored in global trends. According to the GSM Association (GSMA)⁴, the percentage of total smartphone connections in Sub-Saharan Africa will double from 34% to 68% by 2025. Aficionados like Remy are taking their approaches mainstream with ever increasing numbers of community members wanting to

learn more and adopt what the aficionados are championing.

Looking skyward

The humanitarian journey since the advent of the connected age has been somewhat perilous. The nature of the challenges posed by technological evolution are only now starting to be systematically addressed, and there are still mountains to climb across the board. But if we look up we can see the path upwards. We can see a path trodden by the private sector, where startups have grown at phenomenal rates, and incumbents behemoths are forced to take extremely difficult decisions.

The aid sector and ecosystem hasn't evolved a great deal. Innovation, technology, and connectivity remain peripheral topics in a crowded space with many new work thematic jostling for position in a complex age. Frequently these are used as a vehicle for engaging with the private sector, read: accessing private sector funding/financing. And now, for some reason, articles like that above highlighting Remy's story are still common. It is almost as though the sector is surprised that aficionados exist, or that societal evolution will occur through an amalgam of private sector and humanitarian intervention, rather than communities themselves and those aficionados at the cutting edge.

UNHCR's footprint of connected community centres in 20ten spanned only 24 centres across all operations. In hindsight, this doesn't only seem limited in ambition, but also that such interventions will be somewhat 'exclusive'. A 2013 evaluation of the project⁵ highlighted a number of challenges relating to the implementation of such centres in truly stimulating enhanced use of digital technologies and facilitating a cycle of diffusion into communities.

Our understanding of these issues needs to evolve with the trends and if we want to realise our added value to the future of these societies as humanitarians our positioning in our strategies need to frame these appropriately, and our investment and support need to match this direction.

³ <https://www.unhcr.org/news/latest/2017/3/58c7aa054/connectivity-brightening-future-of-refugees-in-malawi.html>

⁴ <https://www.gsma.com/refugee-connectivity/>

⁵ <https://refuge.journals.yorku.ca/index.php/refuge/article/view/37503>

Now let's rewind to the GSMA's African Mobile Observatory report of 2011⁶. This report states that in the five years prior to 20ten mobile penetration in Sub-Saharan increased from 15% to over 50%. These statistics demonstrate the gulf between the reality of what is happening in these societies and our reactions as a supportive humanitarian sector. The CTA intervention when transposed onto that trend of mobile penetration to me implies something inorganic i.e. not built out of the natural evolution many of these communities were going through in respect to 'technology access'.

Given that the majority of humanitarian aid is provided to developing countries, the implications of these sort of statistics on future delivery of humanitarian aid and development is profound. The aficionado's today is the general population's tomorrow and we are lagging behind.

The GSMA Mobile Economy Report 2018 outlines that the major trend facing the developing world is that "smartphone users will gradually transition to higher levels of engagement." In addition, according to Ericsson (in its Mobility Report), global mobile data traffic will increase to 136 billion gigabytes per month by 2024, which is 1.3 times more than traffic today. The change is massive.

Furthermore, ideas around what connectivity means are continually shifting. Georgetown and Berkley academics Mayo, Macher, Ukhaneva and Woroch outline a redefinition of the universality of telecommunication services from household access (think Community Technology Access Centres) towards individual access across space and time⁷.

Our understanding of these issues needs to evolve with the trends and if we want to realise

⁶ <https://www.gsma.com/spectrum/wp-content/uploads/2011/12/Africa-Mobile-Observatory-2011.pdf>

⁷ https://link.springer.com/epdf/ten.ten07/s11149-017-9336-8?author_access_token=j_9NGq-8adGrSH63Dvt3WjPe4RwlQNchNByi7wbcMAY-6q6nNq3yDvSGHgPY6Xm9AoT4fNFwtXRJHCa9g0H-QKvBD1R7QxzUZ9D_zw5S90zCvBjBD1QhIWMiBcM-iksNmTKhvtZGF9X-Z4cdCZdPNvYRA%3D%3D

our added value to the future of these societies as humanitarians our positioning in our strategies need to frame these appropriately, and our investment and support need to match this direction.

Connecting Refugees

The Connecting Refugees report of 2016 was UNHCR's first step in moving the needle to where it needed to be. Research undertaken by Accenture helped bust some myths around refugee phone usage and its importance and this has been widely cited by Broadband for Refugees⁸, the GSMA and others. This was a much-needed update to some approaches that had been floating around for decades, like the Community Technology Access Centre. But even then we didn't fully unpack future trends in this strategy. In fact, the word is mentioned once in the report. It states:

"Downward trends in the cost of devices and services, thus increasing refugees' ability to afford connectivity over time."

Essentially making everybody's life easier. The fantastic thing about technology is that it is continuously evolving. The original Connecting Refugees report highlights percentage figures around refugees that were either 'connected' or 'not connected'. The reality we've learnt is a lot more nuanced than this implicit binary. Connectivity will continually evolve and what it means to people will continually evolve.

Due to decreasing costs of components and innovation taking place on an unprecedented scale within the industry, it is likely, that within the coming decades we'll move towards universal connectivity.

But there are a number of other trends that have an impact on our strategy that weren't covered in this report. And to understand them we don't only head over to Silicon Valley and other western tech hubs, but we need to speak with the aficionados that exist where we are working.

⁸ <https://www.broadband4refugees.org/>

We have reflected on this through a series of blog posts more recently that highlight some of the challenges, but also touch on emerging issues that are getting UNHCR and our operations to think about the strategic implications of some of these technological developments.

It's clear with hindsight there was a mismatch between what UNHCR was trying to deploy as a solution at the time and the overarching societal shift that was taking place that was grounded in the adoption of connectivity by the unconnected en masse.

We have a responsibility to acknowledge trends and work cognisant of their evolving nature. We need to be more strategic in our approach and more adaptable to pivot as and when the direction shifts.

Shades of silicon

Humanitarian innovation practitioners are pretty guilty of being drawn to the buzzwords. Will blockchain help us make breakfast? Are drones going to repair my bicycles? The interventions around these nascent technologies have a slightly bizarre effect on the technology adoption lifecycle. Practitioners are starting to push back against this mantra and the (lack of) evidence they're gathering speaks for itself.⁹

The thing is, as humanitarian organisations we're not the purveyors of technology solutions. We don't design and build it, something that could be easily assumed when hearing the way some speak on the topic. Will we need to become an organisation that has significant capacity for developing technology products in house? I think the verdict is still out on that one but regardless there'll be an impetus for humanitarian organisations to invest more in staff who at the very least understand issues around technology adoption and bridging the digital divide from social, economic and anthropological standpoints, and not only technologically.

This is absolutely imperative when the future of our approach to technology will be significantly

⁹ <https://www.ictworks.org/blockchain-impact-failure/#.XA5arGj0mUk>

more integrated into our work. Commentators theorising about or employing information and communication technologies to tackle development problems (ICT4D practitioners) note the emergence of a 'digital development' paradigm that brings adoption of technologies closer to the mainstay of programming, activities and approaches, rather than as a dedicated sub-area or field in itself. On this journey, we are at a critical fork in the road where those with a responsibility in humanitarian agencies for delivering 'connected programming' need to listen to the trends and pull the aficionados closer to humanitarian intervention. In some areas, humanitarian protection frameworks will manifest themselves digitally. In others, we'll see synergies building with universal service mechanisms delivered through national telecommunications planning. We are braced for intense market disruption in the connectivity space within a decade. It has been well documented¹⁰ that the satellite industry is being revitalised through the promise of cheaper spaceflight and cheaper satellites. Satellite connectivity – contra to that provided through ground-based mobile network operators will be more difficult for governments to control over. We're seeing the technology, media and telecoms sector evolve in that network operators are expanding and diversifying their incomes streams. They are looking more closely than ever at security, Software as a Service, advertising, e-commerce, media and content but to name a few which will further disrupt.

I believe the Connectivity for Refugees initiative can play a supporting role throughout the technology adoption lifecycle but specifically at the start and the end of the cycle. UNHCR has a role in enabling aficionados and innovators to push the boundaries of how their communities are engaging with technology in ways that suit them. The restrictions refugees face whether accessing SIM cards legally or the other barriers like the cost of devices slow and sometimes halt technology adoption lifecycles. Our interventions through connectivity for refugees are designed to be a catalyst that supports this cycle. Likewise, at the end of the cycle, those on the other side of the digital divide, the slow

¹⁰ <http://www.economist.com/brefing/2018/12/08/satellites-may-connect-the-entire-world-to-the-internet>

adopters and those likely to be excluded often require support from non-commercial entities.

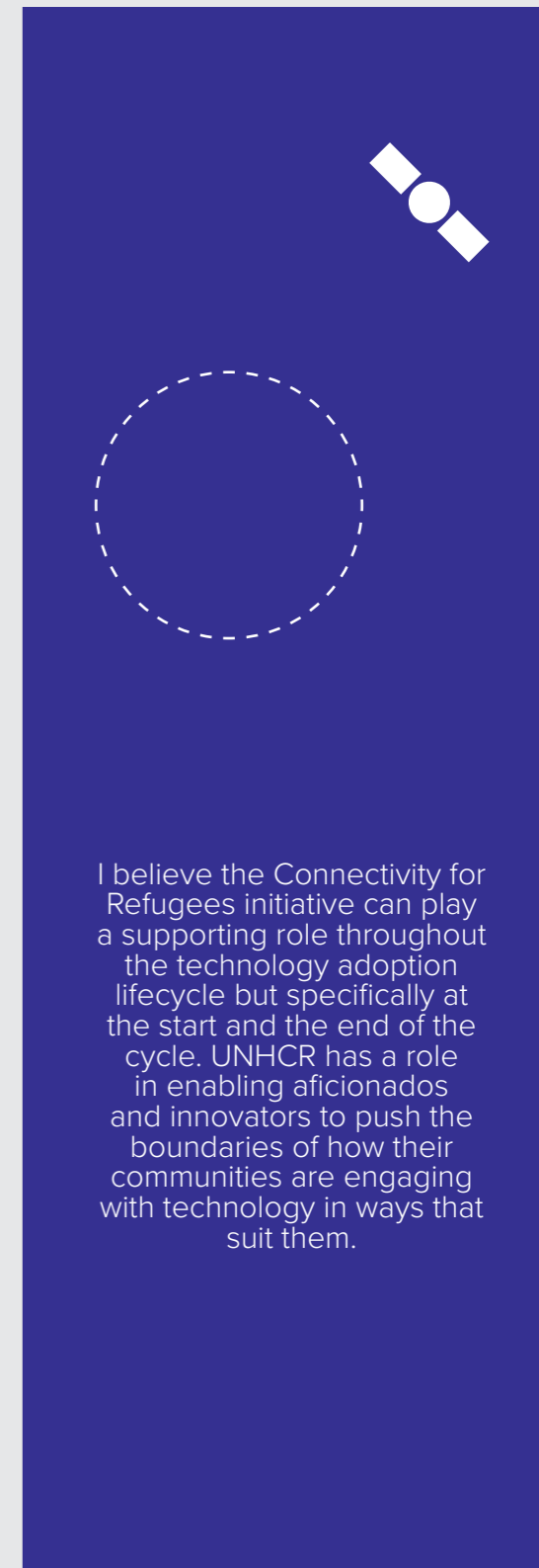
It is this reason why the Connectivity for Refugees initiative will be actively exploring these areas in 2019, not only how these areas will disrupt technologically, but across a number of different disciplines to see what impact this will have on our aficionados who are leading the charge locally.

We'll look at developing our approach to addressing issues of digital risk when connectivity is provided or supported as part of an aid and development agenda, building off the ICRC's recent report on Humanitarian Metadata¹¹. We'll be looking at different types of challenges, from business models around device access to ways we can support aficionados in achieving their goals.

I don't believe that the direction our humanitarian innovation needs to take is that of directing Silicon Valley's latest and greatest to the communities we look to support. In all honesty, they don't need our support with that. What we can do as humanitarians though is empower these aficionados and ensure that our interventions can map onto the broader societal trends we're seeing – linking with that adoption lifecycle, and ensuring that our interventions are supporting these organic dynamics as opposed to running counter to them.

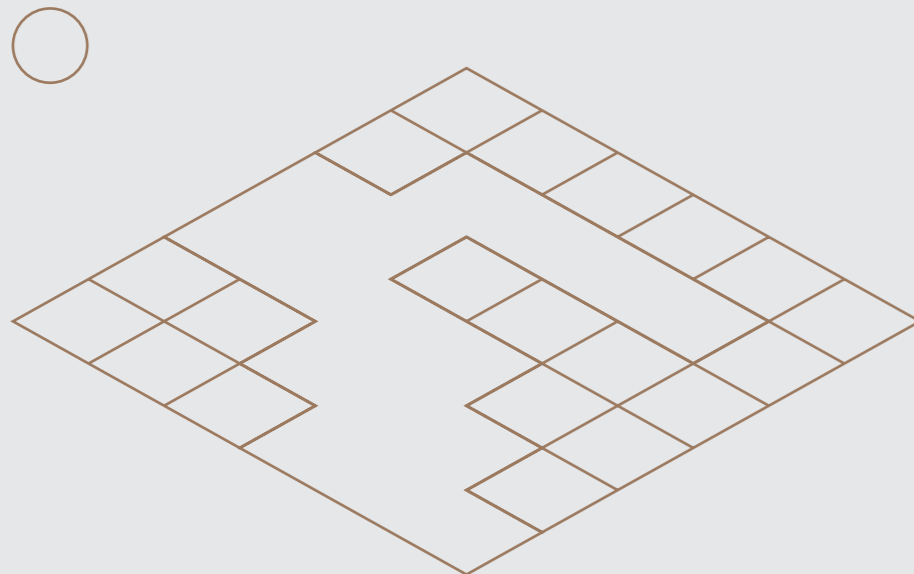
UNHCR's Innovation Service wants to make sure that our Connectivity for Refugees initiative brings that futures thinking in its approach, working with refugee aficionados across the globe to help them push the boundaries of their and their communities' adoption of ground-breaking technologies that will bring countless adventures with all their opportunities and risks. As humanitarians our interventions needs to give these aficionados the space to shine, rather than run counter to their aspirations for their community.

¹¹ https://reliefweb.int/sites/reliefweb.int/files/resources/the_humanitarian_metadata_problem_-_icrc_and_privacy_international.pdf



Humanitarian Innovation and Regulatory Sandboxes

By Aaron Martin,
Legal and Regulatory Consultant &
Giulia Balestra, Associate Connectivity Officer



Regulators globally are exploring and experimenting with new regulatory and supervisory approaches to innovation, including financial technology (fintech). The concept of a 'regulatory sandbox' has so far proven to be particularly appealing to the financial sector as it seeks to promote technological and data-driven innovation, and is spreading to other regulated sectors such as telecommunications¹, data protection², and energy³. These playgrounds for innovation allow participants to test new business models and technologies under the supervision of regulators, usually with the rules temporarily relaxed. Regulators also provide targeted guidance to sandbox participants, including help with understanding how an innovation fits within the regulatory framework. As of December 2018, at least 40 regulatory sandboxes were either in operation or under consideration globally, including in countries that host large numbers of displaced persons, such as Jordan, Kenya, Malaysia, Nigeria, Thailand, and Uganda.⁴

This short essay explores the potential role for regulatory sandboxes in humanitarian innovation. We discuss the stated benefits of the sandbox approach to governing innovation while also acknowledging notable risks and challenges to their sustained deployment. We then briefly reflect on how the humanitarian sector might engage regulators through sandboxes to develop innovations that better serve displaced populations.

What is a regulatory sandbox? It has been described as a "safe space... that creates an environment for business to test products with less risk of being punished by the regulator for non-compliance" and, in return, requires applicants "to incorporate appropriate safeguards to insulate the market from risks of their innovative business" (Zetsche et al. 2017, p. 64).

¹ <https://www.lexology.com/library/detail.aspx?g=75ef-ca5b-069a-41e6-9aed-0ba2264a2bf3>

² <https://ico.org.uk/about-the-ico/news-and-events/blog-ico-regulatory-sandbox/>

³ <https://www.ema.gov.sg/sandbox.aspx>

⁴ <https://dfsobservatory.com/content/regulatory-sandboxes>

Others define a sandbox as a "framework within which innovators can test business ideas and products on a 'live' market, under the relevant regulator's supervision" (Agarwal 2018). The Financial Conduct Authority (FCA) in the United Kingdom is credited as popularising the concept of a regulatory sandbox in 2015 to describe its programme to allow firms to test innovative products, services, and business models in a real market environment. The concept has since spread fast, both internationally and increasingly across sectors, and it is possible to delineate a number of common characteristics of observed sandboxes:

- Objectives: Regulators pursuing sandboxes usually do so to advance financial innovation, markets, inclusion, increased competition, and/or economic growth (Zetsche et al. 2017, p. 68)
- Rules to Entry: Applicants must demonstrate a) need for regulatory relief in the form of a sandbox, b) that they are adequately prepared to enter, and c) how their product or service will support the financial sector while providing genuine innovation and benefit to consumers, while managing risks to market stability and transparency (Zetsche et al. 2017, pp. 69-71)
- Scope: Considerations related to the scope of a sandbox include: a) possible sectoral restrictions on participation (i.e. limitations on which institutions are permitted to enter), and, relatedly, whether to allow existing regulated entities to join; b) limits on the number and kind of customers a sandbox participant is allowed to target (e.g. can a proposal involve vulnerable populations?), and c) either time restrictions or size limits (e.g. amount of deposits) (Agarwal, 2018; Zetsche et al. 2017, pp. 71-76)
- Extent of Regulatory Relief: Only a small number of regulators actually disclose which rules are flexible within the sandbox, and which are steadfast; however, "most authorities refrain from stipulating an exhaustive list of requirements that may potentially be relaxed within the regulatory sandbox" (Zetsche et al. 2017, p. 77)

- Rules to Exit: In general, regulatory sponsors will also specify the criteria by which participants may be expelled from a sandbox, including excessive risk-taking or rule breaking, or failure to meet the stated objectives of advancing innovation, etc.

Some view regulatory sandboxes as a form of principles-based regulation by which regulators afford participants flexibility and discretion in meeting the policy goals and adapting their innovations in response to the regulatory framework (Fenwick et al. 2017; Allen 2018). Others characterise sandboxes as a form of “structured experimentalism” (Zetsche et al. 2017, p. 64).

A number of authors focus on the merits of regulatory sandboxes vis-à-vis specific technology applications. Focusing in particular on the Chinese market, Guo and Liang (2016) propose the establishment of a regulatory sandbox for blockchain applications. Likewise, Ringe and Ruof (2018) analyse the current EU regulatory framework governing so-called robo advisors (the automated provision of financial advice without human intervention), and recommend the use of a “guided sandbox” to promote mutual learning by both firms and regulators, thus reducing regulatory uncertainty for participants. Ng and Griffin (2018) argue that the regulatory sandbox construct could be extended to test the viability of national cryptocurrencies (issued by a central bank), arguing that such a “crypto-sandbox” would permit stakeholders to observe any operational, technical, security, scale, performance, and governance issues with a national cryptocurrency, while providing a view into uptake, benefits, and other opportunities (p. 22-24). Likewise, we propose that humanitarian actors should engage regulators from the financial and telecommunications sectors, and potentially other areas, to explore modalities for using regulatory sandboxes to address common regulatory challenges in humanitarian operations, particularly those impacting refugees and other displaced persons.

It may be premature to draw strong conclusions on the effects of regulatory sandboxes. Even the FCA acknowledges this point in its Lessons Learned Report from October 2017: “It is too

early to draw robust conclusions on the sandbox’s overall impact on competition given its relatively small scale to date and the time we expect changes to embed in the market” (p. ten). Likewise, Agarwal (2018) duly notes that “given that the concept of regulatory sandboxes is still nascent, comprehensive data is not available yet on their effectiveness and economic impact”. Still, the expected benefits associated with the adoption of a regulatory sandbox include:

- More open and active dialogue between regulators and stakeholders;
- Better regulatory assessment of innovation and its risks;
- A data-driven approach to regulation that facilitates innovation, competition, and inclusion;
- In countries with a fragmented regulatory framework, for example, with respect to the oversight of mobile money or other innovations that may implicate multiple regulatory frameworks, a sandbox may help to preempt enforcement actions by a range of regulatory actors (Allen 2017);
- For investors, the fact that a firm is participating in a sandbox may provide some certainty and assurance about the associated regulatory risks of the innovation they are considering investing in.

There are, of course, potential risks to the use of regulatory sandboxes which must also be understood and managed by stakeholders:

- Risks to consumers and the broader financial system could materialise due to the fact that sandbox activity is not fully regulated (Zetsche et al. 2017, p. 79)
- A lack of standards for sandboxes may prove challenging for the cross-border provision of services (Zetsche et al. 2017, p. 80), though recent calls for a ‘global’ sandbox may help to address this problem⁵
- Not all sandboxes disclose the extent of the rules and regulations that may be relaxed; this lack of transparency could result in legal uncertainty and unintended consequences (Zetsche et al. 2017, p. 80)

⁵ <https://www.ft.com/content/ae6a1186-9a2f-11e8-9702-5946bae86e6d>

- Some countries may lack regulatory capacity in terms of resources, staff, expertise, and tools to effectively operate a sandbox (CGAP 2017, p. 2)
- Challenges may also arise in trying to balance different regulatory objectives, such as financial inclusion, stability, integrity, consumer protection, and competition (CGAP 2017, p. 2)

How might the humanitarian sector approach regulatory sandboxes to promote responsible innovation that benefits displaced populations? One can imagine various scenarios where there is a desire to improve access to mobile connectivity or to promote financial inclusion, for example through microlending or alternative forms of credit scoring.

Recent research by the UNHCR has identified a concrete opportunity for humanitarian actors, their partners, and service providers to engage regulators through a sandbox-like construct to improve the lives of displaced populations. Today, asylum seekers, refugees, and internally displaced persons face persistent legal and regulatory barriers to proving their identity in advance of being able to access a SIM card, open a bank account or use a mobile money wallet. While the identification challenges for these groups are multifold and complex, in general, displaced persons lack adequate proof of identity and other documentary evidence required by mobile operators and financial institutions to legally access services. Identification often proves to be a barrier even if a person is registered with UNHCR and has been issued an identity credential by the agency.

In this case, a regulatory sandbox could be erected to facilitate innovative approaches to meeting Know Your Customer requirements for displaced populations in partnership with humanitarian agencies like UNHCR and private sector stakeholders. Experiments could include testing new forms of ‘e-KYC’ based on UNHCR’s registration data. Lessons learned from a sandbox in one country could be shared with humanitarian agencies and regulators in other countries to reduce access barriers to mobile connectivity and digital financial services.

This is just one emergent area demonstrating how the humanitarian sector might harness sandboxes to improve the lives of populations of concern. There are no doubt many innovative ways of working with regulators to address real challenges faced by refugees and other displaced groups. It is our hope and belief that the sector can think creatively about how best to leverage the international regulatory community’s intense interest in sandboxes and other experimental modes of governance to bring real benefits to the people under its protection.

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The final frontier for inclusive connectivity

By Giulia Balestra,
Associate Connectivity Officer

“What happens when refugees tell us—directly and repeatedly—that finding meaning in life is equally or more important than finding food that day? That creating a future for their child prompts them to start a perilous journey and give up the certainty of shelter and food? Refugees come to us and respond to us not as a sequence of needs, but as a whole person.”
- *The Refugee Rethink: What if Maslow was wrong?*

Lesvos, Greece - 2015. A summer that was different, a summer that made other summers become different. We stand on the shore as if we are standing on the door, waiting, looking at the seemingly calm waters and flat horizon. We have food, water, extra clothes, and blankets, first-aid supplies. We think we are ready, ready for what we think are people’s first, immediate, basic needs.

*“Where can I charge my phone?”
“Is there WiFi?”*

¹ <https://www.bbc.com/news/business-34715962>

We answer with silence, feeling trapped in the survival thinking of an emergency response. We forgot that together, with what keeps us alive, there are things that make us alive. Meaning, purpose, connection.

But what if connectivity was a basic human right? As basic as food. As basic as protection. As basic as education. What if refugees and host communities alike had equal access to the opportunities that come with being online, being *connected*? What if paying for a phone, for data and calls didn’t mean not being able to pay for school fees, health care or food?

What if this idea did not make some of us raise our eyebrows, question, doubt or wonder why refugees need WiFi and question why they have phones in the first place?

What about you, and us? Why do you have a phone and why do you need WiFi?

Personally, I use my phone and the internet for work, to stay in touch with my family and my friends, and sometimes to distract myself. These are all good reasons, whether I am a refugee or not. Now, imagine you could use your phone to access information in times of crises, to find out how to be safe or access medical care, to translate what you want to say when there is no other way to communicate, to find a job, to find your family. In this sense, the small piece of connected technology that you hold in your hand becomes even more crucial and more valuable to your life.

The digital revolution will be inclusive. Or it won’t be. That is our choice.

It is time we look at these digital needs and realise that, yes, there are indeed differences in how and why people connect. Yet there is one thing that we all share (or should share): the right to connectivity. I see a world, not too far from now, not too far from today, where we can rethink our approach and change the way we respond to emergencies, shifting the attention from “needs” to “rights”, from “basic” to “human”. One where connectivity is a tool to create a more just and inclusive future.

We can all start today with one simple action, so simple we think that it would not make any difference: be better at listening. Let us listen to what people ask and say they need, rather than what we think is best for them. I believe that this can change the way we work as humanitarians and the way we are as humans.

Inclusive (dis)connections

We live in a hyper-connected and fast-paced reality, where some days my life is 99% digital and 1%...real. Would I know this if I were not connected already and able to navigate, search and discover anything I wished? Probably not. Today, a third of this same world is not connected to the internet. You could say that maybe it’s for the better: I also fantasise about not having an e-mail address, a couch where people can surf on, a liked (or not so much liked) photo or post. After all, aren’t we, the other two thirds, controlled by technology, constantly worried about our privacy and data, competing against robots and Artificial Intelligence for jobs and resources? These worries are luxury too, because we have a choice to connect or disconnect, to choose or not to choose if, how, and when to access the internet.

So whether it is about connecting or disconnecting, what matters is choice and making sure that everyone has the same chance to (dis)connection. Inclusion happens when we strive towards having the same rights and opportunities, and accept that, as long as there are barriers and obstacles in someone else’s way, we also are not free.

The promise

Are we creating a better world by providing connectivity? Maybe. Or maybe not. But this is happening either way and while we strive to make the most, we need to ensure that the same rights are provided to all.

I do believe that if there is something that connectivity can help us do, in this virtual space of ours, is to create what we want to see. A better world. A different world. A more connected world. What if we had a tool for change, right

here, in our hands? And what could this change look like?

We will only know when you, and I and a person with refugee status, all have access to the same opportunities, when we can all afford for a mobile phone, register a SIM card with whatever proof of identity we dispose of, pay for data, and have the necessary skills to navigate this web and know how to make safe and informed decisions. In other words, until *all refugees and hosting populations, regardless of age, gender or demographic group, can (willingly) access mobile and internet connectivity to build brighter futures for themselves, their families and the world.*

How do we make this a reality?

The vision of **Connectivity for Refugees**, an initiative currently led by UNHCR's Innovation Service, is to bridge the digital divide, connect those who are currently not connected and include everyone in the digital revolution that is taking place globally, regardless of age, gender, and diversity. Our role in this is one of connectors too: we want to bring actors in the network closer together, spur conversation and change, and function as a catalyst in realising the vision of Connectivity for Refugees.

Our work consists in developing a practical roadmap towards this goal and to make sure that we get there. The way we see connectivity is as deeply interlinked to freedom and choice: freedom to have access to opportunities and information, freedom to make better choices and actions. Framed as such, connectivity is both a right and the instrument to exert this same right, a *"right to freedom of opinion and expression; [...] to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers"* (Article 19. The Universal Declaration of Human Rights).

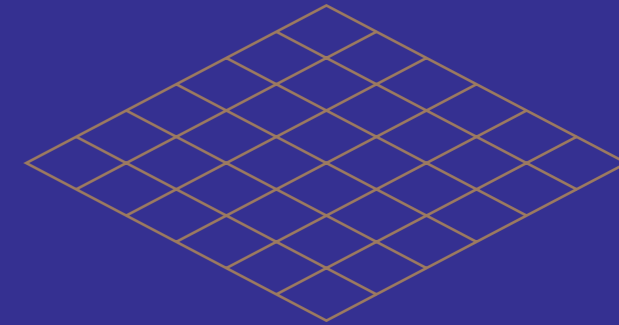
We have come a long way since the inception of the Connectivity for Refugee initiative, learned a number of important lessons which have reshaped and informed our strategy moving forward. There are still many barriers on the path

to connectivity, from technical to social and political: poor infrastructure, legal regulations to register SIM cards, costs of devices and services, lack of relevant content and digital literacy. Immediate action needs to be taken for refugees to have the ability to legally connect to the internet. However, we firmly believe that what is on the other side of the fence - the possibility to create better and more inclusive communities - is worth the attempt to climb it. We will not achieve this if we work in silos: connectivity calls for stronger collaborations and holistic approaches. Everyone has a different role to play in reaching this same goal, from governments to the international community, to displaced populations and the private sector.


The final frontier

The digital world has its own barriers: there's poor infrastructure and coverage, high costs of devices and data, strict legal regulations and many more challenges. At best these factors are delaying the inclusive future we hope for, at worst they are making it impossible for displaced communities to be, and stay connected. On one horizon I see physical borders, higher walls and digital barriers making us all more far apart, and highlighting the cracks between us. On the other one, I see the internet as a place where a shared, inclusive future is a possibility. I rely on the power of the internet to break down some of these barriers and find ways around (fire) walls. I rely on you to join us in rethinking what we mean by basic needs and who has the right and is entitled to a fulfilling future.

Do we not all want to create connections, find community and belonging? And *what if* the final frontier is the one of connectivity as a human right?

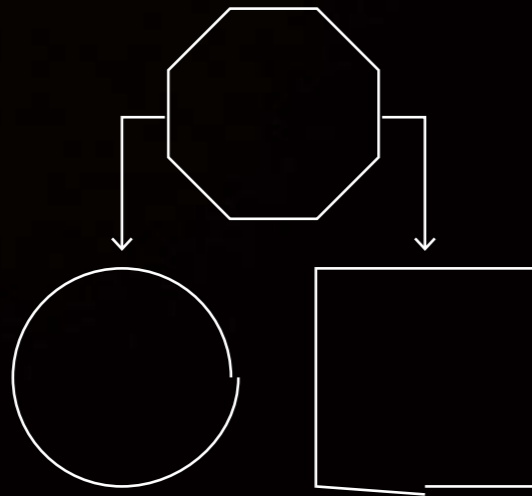


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UNHCR's newest Artificial Intelligence Engineer on bias, coding, and representation

By Eugenia Blaubach, Independent Writer



Public domain: NASA

When Sofia Kyriazi was around ten years old, she loved spending hours at her friend's house—the one whose parents had a large box of floppy disks.

She remembers browsing through the rows of thin plastic squares, stopping when one would catch her eye. She'd pick it out, slide it into the floppy disk reader and wait for it to reveal its contents on the screen. She preferred the ones that weren't labelled; discovering what they did was like opening a gift. Some contained games or images; others simply didn't run, but all of them intrigued her.

It was her first experience with a computer; the first time she peered into an application's raw format, with a poor interface and encountered the terminal window's beckoning cursor. Although she would go on to become UNHCR's first known Artificial Intelligence (AI) Engineer, that terminal window would remain foreign until her first day at the University of Athens.

In 2009, when computers no longer resembled small television sets, Kyriazi began her computer science degree. Looking around the room during her first introductory programming lab, she noticed that everyone around her had already opened the terminal window, created a file, and started typing code.

The assistant professor gave quick directions and offered little help, assuming the students were already advanced. Kyriazi turned to the boy beside her to ask if she had missed any instructions. He said they were just basic steps everyone knew. Except, she didn't know them, and the only other girl in the 20-person class didn't either. They were both caught off guard by the fact that their introductory course was not actually geared toward beginners.

Kyriazi had pursued the technology track in high school, excelled in her math classes and taken a pseudo-algorithms course, where she learned logic and basic commands. But up until that point, she had been required to write all her if-then statements by hand—on paper. She hadn't been taught how the concepts she understood on a theoretical level translated onto

a computer, much less how to program. If all the students had received similar basic training in high school, why did they all seem to know what to do?

She later discovered that the advanced coders in her class were also skilled computer gamers, who had been encouraged from an early age to experiment with computers in ways that she had not been.

Growing up in Athens, Greece, where the Mediterranean air is warm and fresh, Kyriazi preferred spending time outdoors, reading books and going to music events with friends. Gaming was an indoor activity, which didn't appeal to her, but it's likely that the gaming industry itself also played a role in shaping her opinion. The industry has historically marketed products exclusively to male audiences. Capitalising on gender stereotypes to drive sales, they create stories and characters that appeal mostly to males, overlooking females in the process and consequently gendering the activity. Take the "Game Boy," for example. It was given its name for a reason. With the industry primarily targeting boys and men, it's not surprising Kyriazi didn't take up gaming at the time. Still, she had the mind of a coder and found joy in puzzle games like chess and Tetris.

At university, Kyriazi quickly caught up with her gamer classmates. Fuelled by her curious disposition, she absorbed information from the web and taught herself what she was missing. The internet had provided a means for anyone to advance their technical curiosity through building their skills. Yet even in this space when access to information was equal, her talent and skills were met with scepticism.

She remembers taking a pass-or-fail exam in which students were given ten minutes to type a piece of code without accessing the web. She finished in less than two minutes. The assistant professor checked her work. It was a pass.

"When the rest of the guys finished, they were like, 'Why did you leave? Were you not feeling okay? Why weren't you able to solve it?' I didn't understand why they thought that," she said. "I

had just finished early—and passed.”

If there were 100 students in her program, Kyriazi estimates that only ten of them were female. The imbalance left too much room for stereotypes to impose on reality. Kyriazi recalls the time she did an entire project for her group. “I knew they were busy, and I didn’t mind doing it because I knew I was going to learn, but the guys ended up getting a better grade than me,” she said, chuckling at the incongruity of her words.

The Assistant Professor assumed she hadn’t written much of the code and graded her based on that assumption. Her teammates wouldn’t stand for it. They admitted to taking credit for Kyriazi’s work, and she was given proper credit.

This dynamic followed her to Cern, the European Organisation for Nuclear Research where she worked as a technical student for about a year. She was the only woman in many rooms and felt tension from her male colleagues who dominated the environment. “I think my supervisor didn’t even realise I was a girl,” she said. “I honestly don’t think it crossed his mind that I could be feeling uncomfortable as the only girl in the room, or that the other students there were behaving very dominantly, because that is what he was used to.”

Cern Scientist Alessandro Strumia’s recent statements claiming that “physics was invented and built by men, not by invitation” hit close to home for Kyriazi. She says that too often people are so focused on perfecting their practice, whether it is physics or computer science, that they lose sight of social issues and the context in which their work plays out.

“Most [scientists] usually forget that there is a difference between the genders. They approach everyone as an equal, given the same opportunities through life so that the only thing that separates people is intelligence, and not the space to be intelligent...[Prof Strumia] completely forgot to look at how the men and the women are shaped.”

To tune out those who question her abilities,

Kyriazi relies on code itself. She explains that the nature of programming, meaning the process of defining a problem and coding her way to a solution, allows her to constantly see her own progress and empowers her to keep going.

“It makes you feel like you can actually do anything,” she said. “That’s the power of the nerds.”

Kyriazi began to think about technology in a humanitarian context while pursuing her master’s degree in human media interaction at the University of Twente in the Netherlands. It was an interdisciplinary cocktail that brought together individuals from various academic fields including psychology, cognitive science and design—many of who were closely studying human behaviour. They added new dimensions to her work, gave her perspective and a longing to make technology more accessible, especially for minority groups. That summer, she landed a User Experience Design internship with an interdisciplinary team at the UN Refugee Agency (UNHCR), that was led by one of the founders of UNHCR’s Innovation Service in Geneva, Switzerland.

Kyriazi was exposed to a new way of working in what she had imagined to be an overly bureaucratic institution, with little room for the flexibility and creativity she craved. The Innovation Service challenged Kyriazi’s idea of a workplace, which had been previously coloured by homogeneity and misconceptions. “The team is really diverse,” she said. “Not only based on backgrounds and ethnicities, but all their personalities are completely different as well.”

She fit in well at UNHCR. The problem-solving mindset she had been cultivating from a young age married beautifully with the team’s cornerstone philosophy of failing fast and forward. Similar to Kyriazi’s outlook on programming, the team sees failure as part of the process, as an opportunity to reflect and make adjustments, as a necessary step to achieving the end goal.

Kyriazi started showing up to work uncharacteristically early. She was eager to watch the day unfold, as no two were ever the same. It was the first time she had seen people outside of the

technology field attempt to develop technology-based solutions. She had entered an environment where ideas flowed freely and experimentation was encouraged.

“There is an authenticity to what they do,” she said. “They have a need to keep learning, to keep progressing, and you don’t see that often.” Kyriazi noted that the team would also listen quite carefully and try to understand, what her approach to the challenges looked like.

The end of her brief internship at UNHCR was only the beginning. The Innovation team kept in touch, frequently asking her about the latest technology trends, developments in academia, and ways to incorporate Artificial Intelligence into their practice. Eventually, while on holiday in Geneva, Kyriazi was introduced to Project Jetson, an experiment that explores how Artificial Intelligence can be used to predict the displacement of persons in Somalia. A few months later, she joined the project as a remote-working consultant, bringing with her a fresh set of eyes and valuable AI expertise. It would be her most challenging project to date.

Kyriazi looks at the organisation and sees a lot of untapped potential. “Other markets have fully adapted to AI,” she said. “They are using it to meet their needs. UNHCR has not fully adapted. People here are familiar that these technologies exist, but they haven’t mainstreamed them through a strategic approach.”

Now, as the organisation’s first known Artificial Intelligence Engineer, she strives to help other departments reap the benefits of AI. Her latest project tackles a recurring force in her life: bias.

She is working with the Division of Human Resources to build an Artificial-Intelligence-based web application that is programmed to remove sources of bias from the candidate-selection process. For example, given that applications are submitted in English, people with diverse profiles, who would add valuable perspective to the organisation, could be screened out if English is not their strongest language. The team’s new solution would use natural language processing to screen applicants based on their

past duties and motivational letter, not their language abilities. Information on language proficiency would be stored but not used during the screening process.

The web application would also save the department time. “Once they have those extra hours, they can start being more philosophical and reflect on ways they can improve their practice and find more suitable people for each position,” she said.

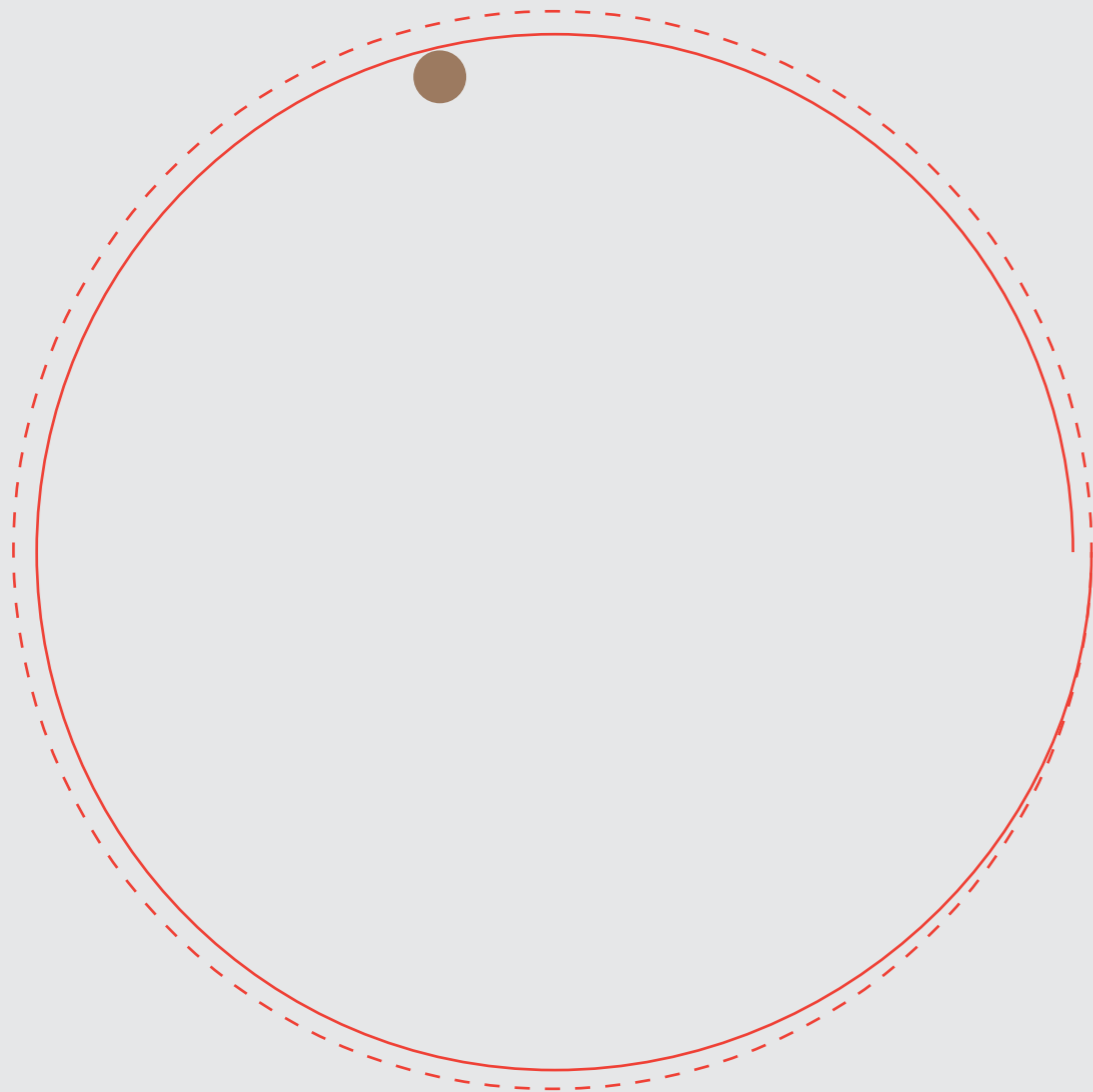
However, people can begin addressing these issues in simpler ways, starting by seeking candidates outside of their established networks. One way to do this is by exploring non-traditional avenues, such as Twitter. “Women in the field might not necessarily have a strong social media presence, but the projects they work on generally do,” Kyriazi said. “We just have to make sure everyone who worked on the project is given recognition, not just the head of the team who is usually male. This way they are traceable, and we can find them.”

Recalling those multicoloured floppy disks from her childhood, Kyriazi hopes her efforts are paving a smoother path for the ten-year-old girls who spend their time on Codecademy—aspiring toward a future in the realm of technology.

“Once they have those extra hours, they can start being more philosophical and reflect on ways they can improve their practice and find more suitable people for each position,”

What does it look like to run a humanitarian accelerator?

By Clara Van Praag,
Humanitarian Education Accelerator Programme Coordinator &
Ian Gray, Innovation Scaling Mentor



Innovation within the humanitarian field is slowly changing the way we approach humanitarian aid and how we implement projects. The decision to run an accelerator for innovative humanitarian projects has therefore been, by definition, a different proposition than running a traditional accelerator. Where the traditional accelerator focuses on providing a cohort with innovation and business acumen and support, and linking them to investors, the focus of the Humanitarian Education Accelerator (HEA) was on building the evidence base so that innovative programmes could demonstrate their impact (what innovators and donors are looking for) through rigorous research and improved monitoring and evaluation frameworks, and provide mentoring support to assist with the painful process of trying to sustainably scale these innovations.

Accelerators are quite common in the world of entrepreneurs and startups. Traditionally, they provide a programme for startups, often including mentorship, knowledge sharing on key business skills and strategies, and in some cases seed funding. The idea is that this intensive period of support will 'accelerate' the startups to be in a position to attract significant investment in order to continue their growth. Accelerators will generally try to link these startups with investors who can provide the funds (in exchange for equity) for that next stage in the business's growth. They are programmes (usually between 3-12 months long) that are designed to provide different support services to a 'cohort' of startups in order to make them 'investment ready.'

Linking impact to evidence

As a concept and practise, accelerators are still relatively new in the humanitarian world. They have a slightly different aim than a private sector accelerator as future profit is not the main motive behind the work. The driving force is to help as many crisis-affected people as possible live a life of dignity and safety, in the most cost-effective manner. Projects are reliant on funding from donors who do not expect equity or to be paid back. Rather, they are seeking evidence that the innovation they are backing is making a positive difference in the lives of refugees, displaced and crisis-affected communities. This requires

robust research, monitoring, and evaluation that can attribute impact directly to the innovation. This means that although the humanitarian sector has been putting funds into innovation, what the funders are seeking is impact as a return on investment, rather than profit as their return on investment. For investors and accelerator programmes in the private sector, scale should lead to profit. For humanitarian donors scale should lead to increasing depth and breadth of impact.

The need for mentorship in scaling for humanitarians

Our accelerator programme ran a series of 'bootcamps,' workshops that sought to provide in-depth training and support, as well as to facilitate peer-to-peer learning. In the final bootcamp of the accelerator, we asked the cohort to review the accelerator, by giving them the licence to design an accelerator. We asked them to highlight what aspects of the programme they would stop, what they would maintain, what they would grow, and finally, what they would introduce to an accelerator. The group self-facilitated this exercise and wrote up their recommendations. When going through the recommendations the facilitation team could only ask the group about topics that they had highlighted that they wanted to discuss.

Below are insights that came from this session, combined with other feedback that the teams provided during the accelerator programme regarding the value that mentorship and internal capacity building has.

One of the most important lessons that have come out of this process is the value of providing a mentor with expertise in scaling humanitarian innovation. Innovations in this sector often get stuck in the pilot phase. There are a number of reasons for this: funding, organisational issues, trying to get others to adopt the innovation and inexperience regarding the key steps needed.

A mentor is an outsider who can help guide the teams on their scaling strategy, partnerships, business models, organisational growth needs, codification, and building a case for funding,

amongst other things. Although there are similarities in the needs of innovation teams across the cohort, there is a diversity that means that a 'cookie-cutter' approach to mentorship is not the best model. Finding a balance between support for shared needs as a cohort, and bespoke technical and strategic support is key.

What have we learned from the first humanitarian accelerator?

When an innovation is scaling, there is often a team that is growing. The need for more specialisms to work in and with the teams increases. Focused support by technical experts is therefore critical if there are gaps in knowledge and experience in some of these areas. Providing specific technical support for the cohort's shared technical needs is, therefore, for an accelerator to use technical advisors. This could be done in the form of workshops specific for the individual innovation team, or for individuals from each of the teams in a cohort group. It is important however that mixed technical workshops contain participants with similar job roles in order to enhance their cross-learning from each other, and unpack similar challenges.

However, trying to accelerate and scale an innovation requires strategic guidance, in addition to technical support from experts on areas such as Monitoring & Evaluation or process mapping. Using a mentor in workshops to train and advise on scaling strategy and planning, as well as the wider aspects of organisational growth, is key to ensuring that teams are able to navigate a scaling pathway, and anticipate potential issues and opportunities as they progress.

Individual working sessions with the mentor that provided most value were:

- **Scaling strategy, planning and reviews:** Periodically working with the teams to establish their scaling strategy, plan its execution and review progress and the need for pivots.
- **Business model innovation:** Exploring potential business models for testing as the innovation scales.
- **Understanding and connections in the**

humanitarian sector: Understanding how the humanitarian sector works, and who the key actors are is critical for scaling humanitarian innovations. Having a mentor with strong connections across the sector enables teams to access these connections for potential funding, adoption, partnerships etc.

- **Partnerships:** Most innovations involve some form of partnership. These partnerships will change and morph as the innovation scales. Providing advice on how to manage partnerships across the full partnership cycle is an area of added value.
- **Organisational development and growth:** Understanding what is required from an organisational perspective, whether the innovation team is part of an established organisation, or is a startup, supporting the innovation team and their organisations through the growing pains of a scaling journey.
- **Entrepreneurship:** A much-overlooked competency within humanitarian innovation circles.
- **General innovation practices:** Many teams do not have strong experience in innovation management. Providing general training and support can enable them to build these competencies.

There were several key learnings that came out from the mentors during this two-year process. First and foremost the involvement of a mentor from the initial design of the accelerator, in order to gain the most from their expertise in the design, as well as ensure that their use within the programme is effectively targeted, is vital for the teams to get the most value.

At the onset, we also thought that a monthly check-in would be sufficient to guide the teams, alongside the bi-annual bootcamps. However, these periodic 'check ins' (e.g weekly, monthly), have mixed value - something of a surprise. For the majority of the teams, monthly check-ins were not hugely beneficial. However, quarterly review and support meetings (preferably face to face) were seen as invaluable for a number of teams. The key takeaway is that periodic reviews work well when the team are able to step

back from the day to day running of their innovation effort and reflect and address significant challenges or opportunities in depth.

And lastly understanding the peculiarities of the humanitarian sector and how it works is vital - directly transplanting private or public sector practises doesn't work. Being able to translate and contextualise learning from other sectors for application in the humanitarian sector is vital.

Actions for a new way forward with accelerators

If we were to re-design a humanitarian accelerator there are several components that we would put in place:

1. Similar to traditional accelerators, there should be a significant amount of time and effort focused on assessing the teams (and their wider organisations) regarding their suitability to join the cohort.
2. Ensure the Accelerator programme is at least three years in length. This allows some of the teams to pivot, as well as being closer to the time it actually takes for innovations to start scaling in the humanitarian sector.
3. Set up clear performance metrics of the accelerator at the onset, and incorporate clear milestones that should be checked throughout the length of the programme through a stage-gated process.
4. Acceleration is a period where the innovation team can go from one or two people who everything is reliant on, into a multi-disciplinary team or startup that rapidly grows as the innovation starts to scale. This requires 'buy in' from any host organisations, and the ability to build a team, whilst for startups, guidance is needed on how to build an organisation. The task of building organisations and teams, systems and processes etc. should not be underestimated, and providing mentorship that can advise on this journey is critical.
5. Hire a mentor (or several mentors) that provide strategic advice to the accelerator participants at key moments in their journey. There is a need for strategic mentorship

from someone who has the view of the entire scaling effort and can support the team across multiple disciplines and areas. There may also be the need for mentors or advisors for particular technical areas, where deep specialist domain knowledge is required. When deciding whether to have one or multiple mentors, the main consideration should be on how much you are wanting to gain learning and insights from across the cohort. Having a single mentor is the best way of facilitating this.

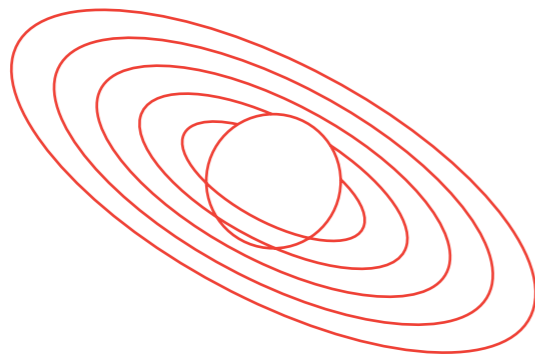
6. Take the time to build trust within the cohort, which has to be done through multiple workshops before the impact of the value of peer-learning and support across the cohort can be seen. Unlike most private sector (or even government) accelerators, the cohort is made up of teams that are often spread out globally with little budget for face to face meetings. Therefore, providing the funds, space and support for the individual teams to meet face to face is significant for their development and delivery.

There is a lot more to learn and we are eager to share regarding what running a humanitarian accelerator looks like in practise. The HEA partners (DFID, UNICEF, and UNHCR) as well as the project teams, hope together to continue sharing our lessons over the next year. Running the accelerator and the mentorship only tells half the story of what we have learned, as we also did a lot of work around Monitoring and Evaluation capacity building, documenting processes and running impact evaluations in humanitarian settings. This has impacted our knowledge on how we can start making better evidence-based decisions for humanitarian programming.

While the HEA programme might be coming to an end in technical terms, it is really just the beginning for understanding how we can influence future humanitarian innovation projects and accelerators based on our lessons learned. And as with every beginning, we hope our experiences can lay the foundation for doing better, and continue to build on the innovative work that is already taking place across the sector.

Weaving innovation through UNHCR's bureaucracy

By Eugenia Blaubach, Independent Writer



The car had been travelling for over three hours; its wheels churning up patches of red mud as it moved along the path. Inside the vehicle, a team from UNHCR's Innovation Service observed the landscape's mountainous terrain. They were on their way to a refugee camp where a creative education project had taken root.

That day, students were once again waiting around for another mission from a far away country to visit their school. They welcomed the group from UNHCR and explained why this programme specifically had made a difference in their lives, and with excitement told the team how they too believed that this opportunity, a pathway to potential employment, should be given to more refugees.

UNHCR's Innovation Service and Education teams have been supporting the project's transition to scale, along with four other projects, through the Humanitarian Education Accelerator (HEA)—a joint initiative of UNHCR, UNICEF, and the UK Department for International Development. Together, the partners are working to accelerate the scaling efforts of promising education programmes like this one by providing field offices and partner organisations with tools to improve data collection activities through mentorship, financing and capacity building.

In order to scale, the five education innovations want to collect data about how they operate, evaluate the effectiveness of their education strategy and build evidence about how the programme is impacting students' lives.

It's a powerful concept that would not only assist the NGO in refining its scaling strategy, but also provide the humanitarian community with highly coveted insights about education innovations in emergency contexts. However, as with all new ideas, the rollout of the HEA would present a challenge that underlies everyone's biggest fear: bureaucracy.

The truth is, the team was there to find a solution to an issue that had been delaying the start of the research. Innovation in this context was

going to be about overcoming systems that were, perhaps, not as agile and progressive as they needed to be, including culture, mindsets, and processes.

Turning a mountain into a molehill

Like a splinter lodged in an unsuspecting toe or finger, sometimes the smallest problems cause the most discomfort. In the case of this project, it wasn't a splinter, but a car. The NGO running the education programme had accumulated a hefty transport bill from making regular visits to the camp and needed a budget-friendly alternative to making the lengthy trek toward the operation site. Their solution was simple: buy a car.

Though it was clearly understood that a car would be a useful tool that would assist in the delivery of project activities, the UNHCR team needed to follow due process as laid out in their standard operating procedures. They normally lease cars to their partners for the duration of specific projects and—despite it being significantly more affordable to buy the car—didn't feel comfortable authorising the vehicle purchase, as it was not in line with their processes.

The leasing option was in line with UNHCR rules, but it was not the most cost-effective option for the partner. It would end up costing them more money in the long run, without the benefit of keeping the car after the project's completion. In these cases, should the partner's needs be placed over UNHCR policies and procedures?

This led to a lot of frustration for all involved in order to find a resolution that would make the best use of the funding available. In the end, the pursuit for the car had to be abandoned so that the HEA project could start, but the situation serves as a useful lesson for future endeavors.

Whether it's a car, a computer or solar lighting, the Innovation Service has learnt, that in these situations, the need to have flexible and agile funding in today's changing humanitarian landscape is paramount to allow them to innovate. The rules, structures, and processes that are put in place to limit risk should be respected,

however, perhaps it is also time to ask: Do these rules still serve in the best interest of those we are trying to assist? Do we need to think about re-interpreting the rules in different ways, or perhaps re-writing the rules altogether if this is a bottleneck being faced across all operations?

“The scope of the HEA is not as physical—in the real sense of the word,” said Salva, who leads financial and administrative activities at the Innovation Service. “What I see is that operations tend to prioritise, or place more emphasis on, projects that are more straightforward: they build a camp; they build a school. The HEA is a concept: scaling education. It’s not something you can touch with your hands, and I think that’s the problem here.”

This was a challenge that Clara, who manages the HEA programme under UNHCR, had witnessed within the organisation and with additional partners. For her, communication was always key to the success of the project.

“Establishing clear communication on the intent of new initiatives, and ensuring the correct people are involved from the start will go a long way in ensuring that overcoming bureaucratic hurdles is a thing of the past,” Clara mentioned. In as much as innovation can be flashy, a large part is also working together with people to shift mindsets and improve internal processes.

During their end-of-year missions, the Innovation team invited all parties involved to discuss the research and recap the year’s successes and shortcomings—a tactic that brought the field office and partner closer together. Though the Innovation team sparked the conversation, they encouraged the field office and partner to keep the momentum going by holding monthly meetings, sharing monthly briefings and inviting each other to special events. With more direct and frequent interaction, the UNHCR country team’s have gained a better understanding of the HEA’s vision, which is no longer just a construct from HQ. Ensuring that its implementation could continue without UNHCR’s lengthy processes getting in the way.

Killing two birds with one stone—or not

Hundreds of kilometers east, another HEA project faced similar gridlock. The project partner in this country runs its education programme in two refugee camps. Given that the research would be looking at the impact of the intervention holistically and would be managed at the HQ level, the expectation was to write one project proposal agreement for both camps.

In reality, to split data collection activities between the two camps, two separate project agreements were needed. This meant that the partner had to write two separate budgets, two project narratives and invest double the manpower for the financial reporting of what was essentially the same project. This was another process in which innovative approaches to simplify the work for the project partner should be established.

The project was understood differently across the two camps, which were located on opposite ends of the country. While the development of the partnership agreement went smoothly in one camp, it was a slightly different story in the second camp. Halfway through the second year of the programme, the project agreement had finally been signed, and the research initiative was up and running. But when it was time to renew the project proposal, a changeover in staff ushered in new staff who had not been part of the initial negotiation process, and had not yet had a lot of contact with the project as a result.

As mentioned in the previous example, in order for novel ideas to take root, all stakeholders need to have a full understanding of what is trying to be achieved. Although the partner took the time to explain the intervention—why it is being implemented, where the funding was coming from and how it had been administered—the process still resulted in delays in signing the project agreement.

From the partner’s perspective, it was difficult to imagine how one research project could generate such different reactions from within the same organisation. In hindsight, the arrival of new staff was an opportunity to instill the value

of research which would help to understand how to scale programmes better. Clara encourages coordinators of future programmes to take that opportunity.

“When we have a programme that we know does not fit the mold, we need to take that extra effort, take the time to re-explain and re-engage rather than place that burden on the project partner,” explained Clara.

At UNHCR, staff changeovers are common and happen often. Looking back, the Innovation team could have foreseen these challenges and taken a more proactive approach at addressing them.

Although other changes served the project positively. At the Innovation Service, where siloed labs had previously provided the team structure, a new multifunction team approach enabled opportunities for more people to collaborate on the HEA. The Innovation Service recognised that with the simplified structure, a new space for integrated support was created. Future programmes will be able to lean on a much wider range of experiences, in order to ensure that learning and capacity building in new approaches can be targeted throughout frequent staff turnovers and changes in the team structure of a programme.

Square peg, round hole

The HEA is a misfit project in some respects. By UNHCR standards, it doesn’t fit the mold. Not just figuratively, but literally. With its long-term approach to research and emphasis on capacity building, the project was not compatible with the corporate tools. Projects entered into the system need to be categorised using the software’s predetermined objectives and indicators, but the available options didn’t encompass the scope of the HEA project.

The way UNHCR understands and delivers humanitarian aid has evolved over the past 70 years. Realising it is not enough to meet refugees’ basic needs, the organisation is placing greater focus on providing them with opportunities to thrive within their new communities.

Projects like the HEA embody this new mindset by funding research and data collection, but the systems used to manage their implementation do not.

While the organisation may be encouraging a shift in humanitarian work, the bureaucracy is still lagging behind. These innovative programmes will be systematically seen as outliers and consequently face barriers to implementation if the bureaucracy does not reflect the organisations widened scope of work. This not only requires improved systems, but also a focus on training of staff who have to continuously deal with projects that are fitting more and more outside of the traditional scope.

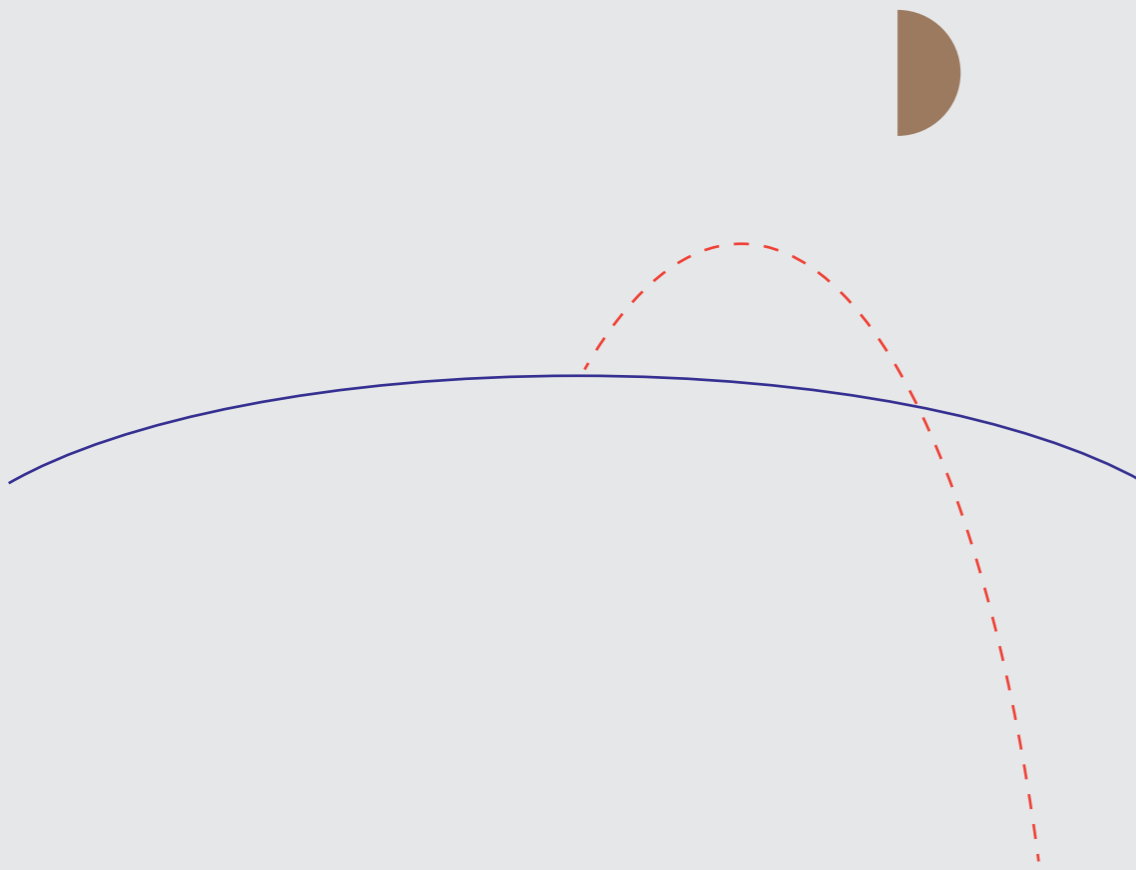
Partnerships beyond money

In the nonprofit world, funding is a common problem—the lack thereof, that is—but for the HEA barriers have sprung up in the distribution, not the acquisition of funds.

Clara explains that challenges rolling out the project comes from the fact that the HEA is giving money for data-collection, research, and evaluation—all necessary ingredients to develop a successful scaling strategy but not traditionally considered priority items for delivering humanitarian aid.

Given that they work to fulfill the immediate needs of refugees, humanitarians must often think in the short term, and within UNHCR, only one year given the annual budgeting structure. While this approach maximises their impact on the ground, sometimes it may limit their ability to look into the future and understand how to effectively scale. If the HEA project is viewed through a short-term lens, research, monitoring and evaluation are seen as isolated actions that don’t have an immediate impact on refugees. The focus needs to be on seeing these components as necessary tools to form promising, long-term strategies that will enable humanitarians to develop programmes that provide sustainable, long-term futures for refugees.

UNHCR’s cumbersome budgeting process does little to make small funds specific to monitoring,



“What we learned from this is that giving money isn’t the basis to form a strong partnership,” Clara said. “Increasingly, our role is about coordination, strategy and facilitation. If a partner can achieve funding and sustainability from elsewhere, perhaps that’s a success in itself.”

evaluation and research more attractive. In fact, one office went out of its way to avoid the process altogether. The team concluded it would be easier to charge project expenses directly to the Innovation Service budget line instead.

Another office decided to give the outdated process a try. To have the HEA funds transferred to their budget, they had to start by writing a budget committee memo. The memo has to be approved by many stakeholders before it is submitted to the budget committee for final approval. If we were to track the movement of this document, it would have definitely racked up some airmiles. As it travelled from the field offices, to the branch office, to the Desk Officer for two months—each one changing the numbers until an agreement was reached. When the memo was finally signed, they were told it had been done incorrectly and needed to be redone. This process could be made more agile by using electronic signature authorisations and ensuring that the figures could be made available for viewing by all parties concerned (from the field to HQ).

People are channeling their time and expertise into maneuvering the bureaucracy instead of using them to generate impact on the ground. Money allocation, budgeting, signatures are all a form of logistics in order to get the final project agreement between all stakeholders. They are a means to reach an end goal, and are not the end goal itself. But sometimes the breadth of administrative processes can make logistics feel like end goals in their own right.

As the HEA enters its final year, one of the partners has decided not to receive funding from the HEA in 2019. They will retain a partnership with UNHCR but prefer to seek funding outside the accelerator and avoid the bureaucratic budgeting structures. This unexpected change of plans will allow the Innovation team to bypass logistics and concentrate on adding value to the partner organisation in other, impactful ways.

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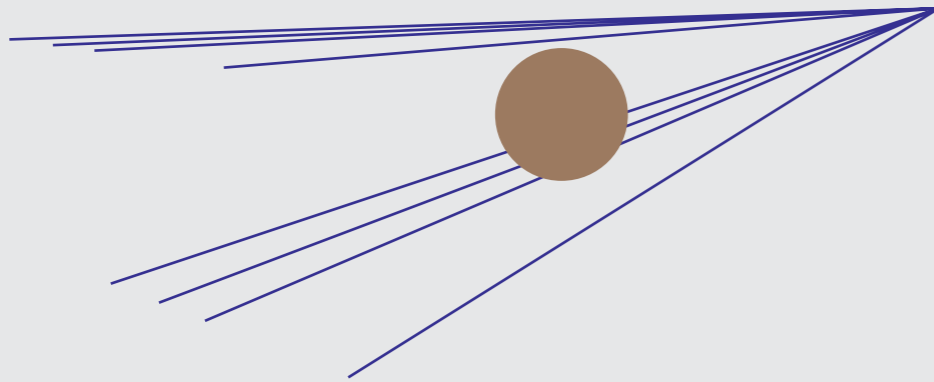
coordination, strategy and facilitation. If a partner can achieve funding and sustainability from elsewhere, perhaps that’s a success in itself.”

Paving new paths for the future

Despite all the roadblocks and delays, the project teams have managed to roll out their research projects. Looking back at their trajectory, Salva encourages individual employees to cut through the organisation’s cumbersome processes by adopting a different mentality:

“In my opinion, the best way to approach it is to re-engage with all the rules we have set up, improve our financial systems and allow our staff to work in a more flexible way,” Salva explained. “Things can improve from a bureaucratic point of view if we allow people who know their work to bend the rules to achieve their main goal, paying less attention to details and looking at the bigger picture. We try to make the best of what we have at our disposal,” he added. “Sometimes you end up doing a great job, other times you feel that you are not being given the tools to fulfill your work.”

Overall, these colleagues at the Innovation Service feel the organisation is moving in the right direction. They will take the lessons learned through the challenges encountered, and in 2019 try to do what they do best: innovate to ensure that these bureaucratic challenges become issues of the past, so that UNHCR as an organisation can do better in the future.



What does it mean to be a Data Scientist in the humanitarian sector?

By Rebeca Moreno Jimenez, Innovation Officer

Back in 2012, Harvard Business Review stated that Data Scientists have the “sexiest” job of the 21st century. They also named the role of a Data Scientist as the second fastest growing job in the U.S. market. And it’s true, Data Scientists are in high demand. People often view this role as a data solution master, when in fact, we usually come up with new problems and more questions than solutions. Nevertheless, being a Data Scientist in the humanitarian sector is indeed an exciting job. The most important part though is having the opportunity to use your skills, mindset, and tools for social good.

What is a Data Scientist?

There is no universal definition of a Data Scientist. The general agreement is that a Data Scientist is a sort of interpreter with a toolbox. Data Scientists have the ability to translate back and forth from technical jargon - usually related to math, statistics and/or computer science - to business strategy or sectoral expertise. And beyond translation, the interpretation: the ability to communicate the data insights found - visually or in other creative approaches.

A Data Scientist is a human (yes it is important to make this distinction nowadays) that can support others to solve problems or respond to critical questions by analysing and finding trends in data, both structured and unstructured data¹

Examples of this type of data include:

- a single spreadsheet with a survey or Geographic Information System (GIS) coordinates (small-structured data);
- text transcription of a focus group discussion (small-unstructured data);
- sensor data with per second timestamps, or call centre logs (big-structured);

¹ Big data is data with four characteristics (four V's): 1) high volume (usually stored on servers or several very large spreadsheets), 2) variety (comes in different formats such as text, audio, video), 3) velocity (produced every minute or second in large amounts) and 4) veracity (sometimes cannot be verified, e.g. social media)

- voice recordings, social media/media posts, and satellite imagery (big-unstructured).

In summary, a Data Scientist should be able to collect, clean, process, analyse, and visualise all of the aforementioned examples of data.

From data wrangling to changing mindsets

Shelley Palmer, a Data Science Adviser, created a venn diagram on the minimum basic skills needed for a Data Scientist: computer programming, subject expertise, math or statistics. An important point missing here is the criticality of communications; the ability to visualise and turn into action some of the data research findings and ideally influence decision makers to turn these insights into action. We've updated her initial diagram to reflect this crucial competency.

But beyond the skills, a Data Scientist requires a particular mindset with multiple important facets. This includes:

- A mindset that emphasises detail upon analysis but the big picture on communication;
- A mindset that is inquisitive; the ability to dive deep into conversations with colleagues to obtain expertise that they have on their data;
- A mindset that values principles, to help others reform processes that are related to ethics, transparency, and accountability.

This mindset is important because even if you are “technically” savvy as a Data Scientist, nowadays a machine could process data faster than us. Still, the mindset of curiosity, putting ethical frameworks first, doing no harm with data, and the ability to communicate insights to push for social good, is the realm of humans in this field. This is actually the main idea behind the fourth industrial revolution: it all comes down to people and values. And in our sector, people and values are the highest desired competencies. The work we do reflects our values and we bring value to people with our work. This could translate into building a map or a graph to help

scope the magnitude of a humanitarian crisis or by analysing social media text to provide insights into appalling xenophobia, discrimination and racism towards refugees. Our mindset defines our worth as Data Specialists. We can do our job better if we understand people and put people first.

The honest truth: our challenges

So, what are our challenges working in the humanitarian sector?

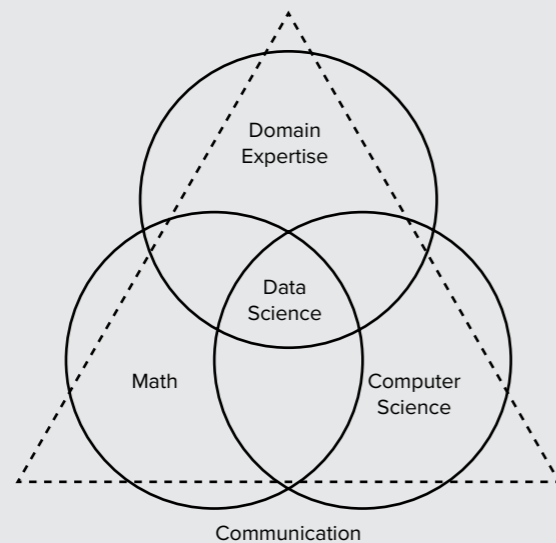
First, is the lack of full research freedom, compared to more academic fields of work. This is challenging for Data Scientists whose curiosity has driven their research success. In the humanitarian sector, we pursue research because there is a humanitarian need. And with that need comes the responsibility of delivering timely insights.

The second challenge is the complexity of the

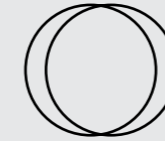
issues we research. Imagine trying to communicate the complexity of human behaviour - like the intention to flee for refugees - even in zones where there is clearly a conflict and the data clearly portrays that people are not moving. One phrase I keep repeating in the office is: I probably can't tell you why but I just found a correlation although that might be not the cause.

Third, is that our sector is often lacking high-quality data. Paradoxically, this is the most important thing we need to do our work. There are many reasons why we don't have the quality of data we need. Sometimes data access is a constraint because of individual privacy and protection principles. Other times, no one is collecting it because there is no access to the area where the data lies. And sometimes the methodology for data collection is simply just poor.

Another critical challenge for Data Scientists is the need for more diversity in our sector. The technical expertise needed to become a Data



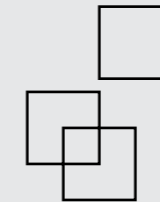
Skillsets of a Humanitarian Data Scientist



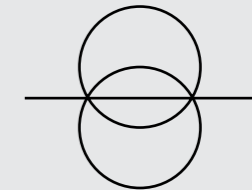
Data Management & Research



Programming and Coding



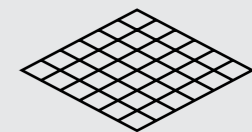
Statistics and Analysis



Mindset and Culture



Collaboration and Coordination



Communication and Advocacy

Scientist usually comes with studies related to science, technology, engineering and math (STEM) areas - backgrounds that have been typically dominated by a male workforce. Data Scientists who are women encounter challenges that male counterparts don't face. We struggle to have access to equal space to speak about our work and consistently face an overarching male-driven narrative.

For example, I recently participated in a panel on socially inclusive AI at the AI For Good Summit in 2018. Despite the majority of the panels at this conference not representing the diversity of the sector, our panel had primarily women speaking about their experiences. Only a few minutes into the discussion, the panel was interrogated about why we were speaking about diversity and inclusion when the panel only had one male speaker versus four female speakers. The audience member was offended by the notion that four women and only one man could represent a coherent voice on diversity in the data science and AI space.

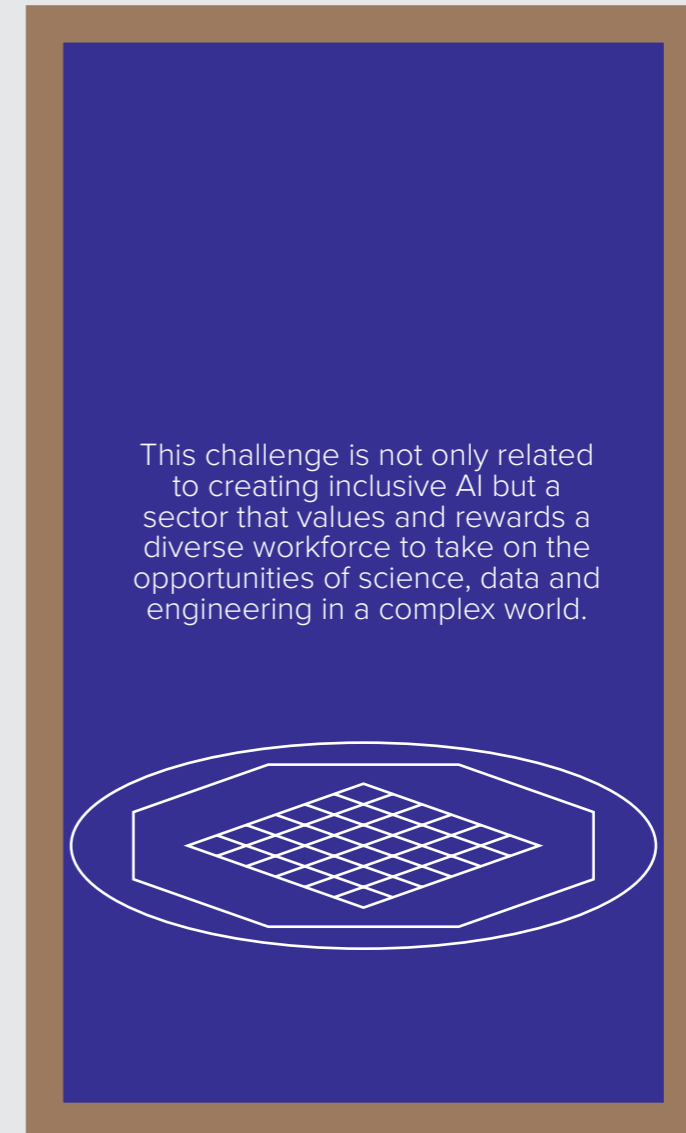
While I understand the sentiment, I disagree with this shallow view of equity and diversity. The majority of people designing these systems are white and male. When it comes to designing AI, we need more women and we need more diverse voices building these systems - otherwise, they will be inherently biased. This challenge is not only related to creating inclusive AI but a sector that values and rewards a diverse workforce to take on the opportunities of science, data and engineering in a complex world.

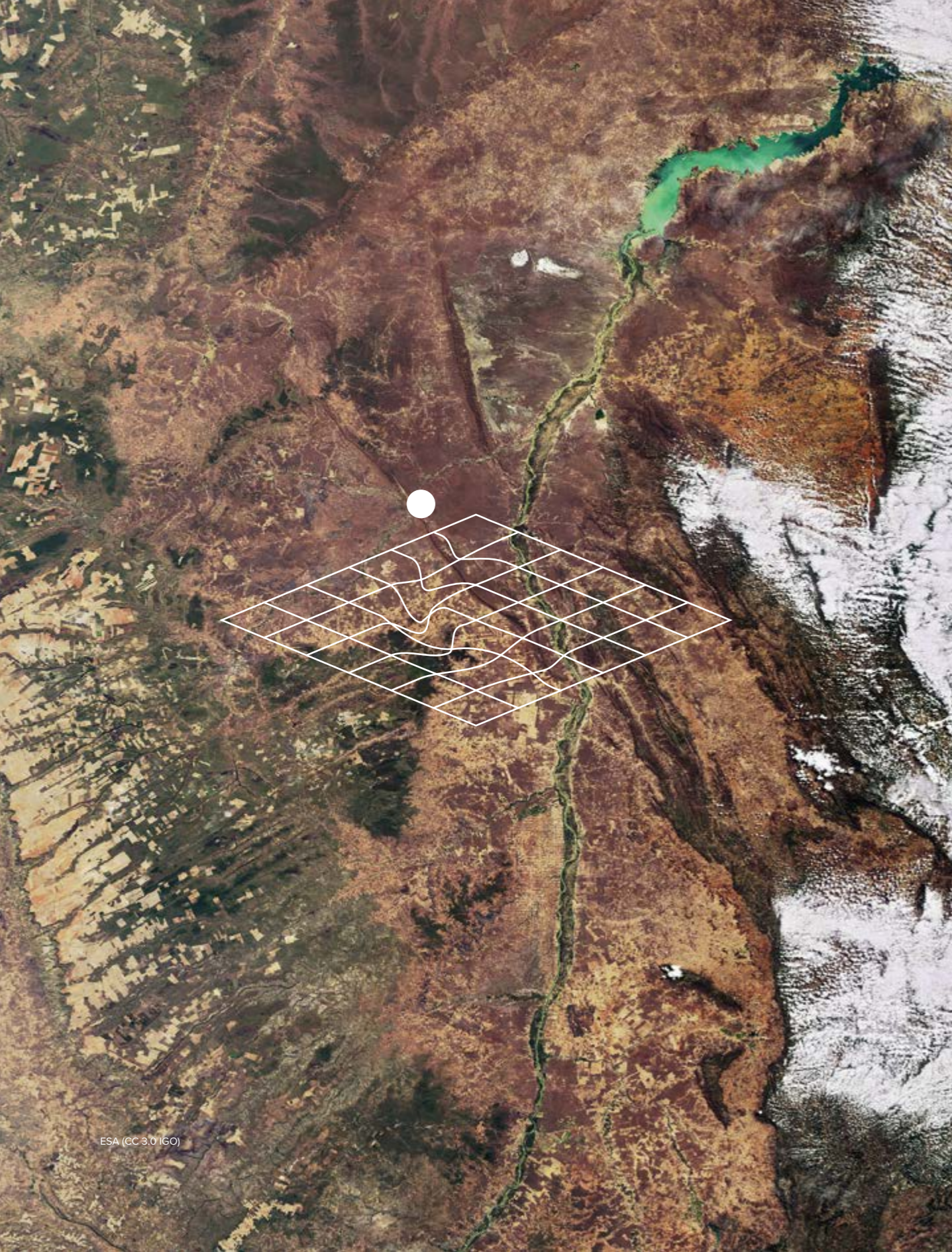
We are here to stay

Even with these challenges, Data Scientists in the humanitarian sphere are here to stay. We still have a long way to go before people truly understand how Data Scientists can add value to the humanitarian sector. We will also need to change the process of hiring and change our HR policies to be more flexible and to attract the talent needed, and more importantly, retain it. It also requires bold managers to bet for systemic change, to bring us on board and challenge what a traditional humanitarian looks like. For example, in my case, my manager bet on me, invested in me and gave me access to learning opportunities to bring new knowledge into the team and organisation.

And as a Data Scientist, we can't create change alone once we're inside a humanitarian organisation. I work with a great team of engineers to help build the data portfolio for UNHCR's Innovation Service. Not every Data Scientist can have math, computer science, and engineering skills - seek people with skill sets that complement your work; collaboration is key.

So, be bold, be humble, and if you're a manager - create space for non-traditional profiles in your team so you can find your unicorn.





Catching the Big Fish: How UNHCR Brazil harnessed the power of innovation

Why has innovation been such a success in Brazil? The answers may not be what you expect.

By Amy Lynn Smith, Independent Writer and
Strategist

What does innovation look like in a rapidly changing environment — and once you have a definition in your hands, how do you use innovation to carry your work forward? And does that definition change in the face of an unfolding emergency? To explore these questions, we took a close look at the UN Refugee Agency (UNHCR) operation in Brazil, where a number of innovative initiatives have prospered in recent years. What were the factors that drove that innovation and helped it succeed? And how can Brazil's efforts be replicated by other country operations?

Recognising the urgent call to respond to intensifying humanitarian needs worldwide with creative, collaborative solutions, UNHCR is committed to creating a culture of innovation. Understanding exactly what innovation means is essential to infusing it into every area of UNHCR's work.

Consider, for example, Raizes da Cozinha (Roots in the Kitchen), a gastronomy entrepreneurship project of UNHCR Brazil partner Migraflix. According to Camila Sombra, a Durable Solutions Assistant at UNHCR Brazil, the partnership provided a direct response to a specific challenge: organisations like Migraflix want to support refugee integration and access to sustainable livelihoods, but often don't have the resources to do so on a significant scale.

Partnering with UNHCR and others helped Migraflix build a more robust, strategic project. Raizes da Cozinha provides entrepreneurship opportunities for displaced people and gives them training to open their own restaurant or catering businesses, while raising awareness of refugee issues among the Brazilian public. What began as a pilot project in 2017 is expected to involve more than 100 participants in 2019.

"When we talk about innovation we normally think of something digital, so at first I didn't think I had a good example of innovation among the projects I have been working with," Sombra says. "But innovation can be seen as a new way of providing responses to issues that we have already identified, but we were not able to tackle. Innovation means developing tools and expertise that enable us to provide broader responses to needs."

Swimming against the stream of assumptions

Sombra is not alone in her initial impression of innovation as being exclusive to technology. It's one of the many assumptions people make when they hear the word "innovation." But having experienced the spirit of innovation that runs through UNHCR Brazil — inspiring new approaches to solving age-old problems — she has a much different viewpoint now.

According to Emilia Saarelainen, Manager of UNHCR’s Innovation Fellowship Programme—which develops UNHCR staff’s innovation skills and supports them in facilitating innovation with colleagues, partners, and refugees in their own operations — it’s natural for people to associate innovation with technology. After all, technology innovations like 3D printers are concrete and very visible examples of one kind of innovation. But creating sustainable innovation at UNHCR and beyond requires embracing the less tangible aspects of innovation too.

“People typically think innovation is about technology or ideas,” says Saarelainen. “Innovation is about both of those things, to some degree, but it is about much more than that. An idea is only the beginning. Innovation is about how you put those ideas into action in a way that creates value.”

At UNHCR, innovation is centered around people and processes. As Saarelainen explains, sustainable innovation requires people who will put processes into action to solve problems and achieve an operation’s goals — and those processes aren’t linear, which can create challenges. That’s one of many reasons that innovation is a team effort, because people engaged in the process of innovation must be willing to ride the waves of each project as it evolves.

In fact, the prevailing myth of a lone “hero” who saves the day with a bright idea may be one of the biggest misconceptions about innovation there is.

“We have this picture of the ‘lightbulb moment’ of a single individual, but it’s rarely like that,” Saarelainen says. “Especially in an organisation like UNHCR that’s hierarchical and bureaucratic, we don’t only talk about the creative type who comes up with the big ideas then leaves the scene. That’s where the work starts: someone must test and develop the idea and finally push the idea through, which takes a collaborative effort. The people working together as a team are really the innovation heroes.”

So what is in the water in Brazil that has made innovation catch on across the operation?

Although some of the drivers of innovation in Brazil were specific to the country’s culture and the operation’s immediate needs, many of the other principles applied in Brazil — such as community-based engagement, collaboration, an appreciation for diversity and inclusion, and supportive leadership — can be replicated at other UNHCR operations.

Principle 1: Turning a drought of resources into a cascade of solutions

In many ways, Brazil’s rapid adoption of innovation was a case of necessity being the mother of invention, as the saying goes.

Although Brazil doesn’t have the highest number of refugees across UNHCR, the population of displaced people seeking protection in Brazil is at an all-time high, specifically with the influx of asylum seekers from Venezuela beginning in 2017. What was once an operation with one small office and one satellite location, with a total staff of about 25 people, has grown to include five field offices across Brazil with a staff of almost 100.

“We went from a very quiet operation to emergency mode, so at the same time we are growing and struggling to offer better services, we have been very open to innovative solutions,” says Luiz Fernando Godinho, a Spokesperson for UNHCR Brazil.

“It happened very quickly and I think that’s one of the reasons UNHCR Brazil is so committed to innovation,” adds Diego Nardi, a former Durable Solutions Assistant in Brazil who is now a Associate Protection Officer (Community Based Protection) in Ecuador and a current Innovation Fellow. “When we do this kind of work with low resources, we need to be very creative about the solutions we create.”

The culture in Brazil is another factor, Nardi says. A history of resistance to dictatorship has influenced a deep commitment to civil society, and there’s a strong legal framework in place to assist refugees and asylum seekers.

“The people in Brazil who are interested in the

refugee agenda are very focused on inclusion and diversity and empathy, which is the mindset needed to push innovation forward,” he explains. “This also reflects the community-based approach that is a policy across UNHCR.”

UNHCR’s community-based approach aims to intentionally involve refugees in accelerating solutions for their own protection and integration in collaboration with UNHCR and their host community. This approach in itself is a significant driver of innovation.

“In times of unprecedented crisis we need an unprecedented response, and that’s going to require an innovative mindset,” explains Vinicius Feitosa, a former Senior Protection Assistant in São Paulo who is now an Associate Research and Information Officer in Copenhagen and also a current Innovation Fellow.

It’s notable that three of the current cohort of 25 Innovation Fellows came from the Brazil operation, having worked under Isabel Marquez, who was the country Representative — the highest level of country leadership — during the operation’s period of rapid growth. The Programme’s application process is rigorous and highly selective, so having such a high percentage of participants from a single country reflects the operation’s commitment to innovation.

“We need to implement new solutions with a human-centered approach,” Feitosa adds, “and it’s very inspiring to feel connected to the community with a shared mindset of reframing the problem and trying something new.”

Principle 2: A rising tide lifts all boats

The spirit of community-based engagement was exemplified by a project called Creatathon, a partnership between UNHCR Brazil, Google, Impact Hub, and Migraflit, which began taking shape in 2016.

“We wanted to create a structured approach to having an open discussion between refugees and locals about the main problems we needed to solve,” Feitosa says. “It was obvious early on that we, as a group, had a very good

understanding of the problems, but we needed to create ideas and experiment with solutions.”

This experimentation was carried out through a series of workshops during which refugees mapped their most pressing demands, along with local entrepreneurs and technology developers who collectively created solutions for those problems. The workshops covered topics such as design thinking, business models, and client development, and led to the creation of a number of solutions.

All of the solutions were focused on giving refugees access to reliable information and integration tools. For one project, participants built on an initiative that was already underway within UNHCR’s Innovation Service: help.unhcr.org, a global website that provides information on protection and integration for refugees.

While UNHCR Brazil prepared to launch its version of the platform in 2018, Creatathon participants brainstormed ways to take the initiative one step further, and started developing a network of supporters to the program.

“The website is more mature now, with lots of countries involved, and Brazil now has a consultant working full-time to scale up community engagement around the website,” Feitosa says. “I think this initiative has inspired our operation to continue to look for innovative methods of incorporating refugees’ voices and mindsets in the work we do.”

Principle 3: Community engagement creates a wellspring of innovation

Innovation doesn’t have to be as highly visible as Creatathon was. Smaller community-based projects also make a significant impact on achieving an operation’s goals.

One excellent example is UNHCR Brazil’s partnership with Télécoms Sans Frontières (Telecoms Without Borders), which was established in response to the influx of refugees from Venezuela. The emergency required UNHCR to quickly rethink the environment in which it operates to respond to the needs of asylum seekers.

Télécoms Sans Frontières, an NGO that specialises in technology and telecommunications for humanitarian crises, approached UNHCR and together they initiated a pilot to provide free telephone calls to refugees living in UNHCR settlements.

“It was such a relief for displaced people be able to contact their families and let them know their journey to Brazil ended well, and to coordinate if they have family in other parts of Brazil so they can be reunited,” says Flavia Faria, Senior Public Information Assistant in the UNHCR Field Unit in Boa Vista. “The project with Télécoms Sans Frontières has now grown to multiple shelters and a fixed space at a local university near our office, where refugees can go to receive orientation about the procedures for asylum and temporary residence claims, apply for social benefits, and attend Portuguese language classes. The project has potential to grow and inspire others.”

Innovation was equally important to the creation of the Young Professionals Program, a project launched in 2017 that extends an opportunity to refugee youth that was already available to Brazilian youth. A law in Brazil requires large companies to hire a certain number of young professionals between the ages of 14 and 24. Refugees are allowed to participate but were often overlooked, perhaps because they didn't speak Portuguese well enough.

In 2016, a group of unaccompanied refugee youth arrived in São Paulo, and with the approval of the country's justice system, they were eager to begin working to support themselves. UNHCR Brazil connected with an advocacy group called Mulheres do Brasil (Women of Brazil), which suggested that UNHCR organise a group of asylum seekers and refugees who would participate in a two-month course to prepare them for employment opportunities. The course was delivered by an established educational institute, Instituto Techmail, with scholarships provided by private companies. After the success of the first course, the institute now reserves four spots for refugees and asylum seekers in every class of 30 it hosts a few times each year.

“This project helped change my mind about the way we work with refugees,” Sombra explains. “Instead of thinking of them simply as refugees, now we also see them as young people, as people with disabilities, as LGBTI people — Brazil has well-developed policies for these groups. Now we no longer have to do something just for refugees, but we can include them in a mixed group of Brazilians so they integrate and make friends and can take advantage of ongoing opportunities that already exist.”

Principle 4: Leadership steers the team toward innovation

For innovation to thrive as it does in Brazil, the entire operation needs to be supportive and engaged, which begins at the highest levels of leadership.

“Managers must create the structure and space for true collaboration, and leaders need to set the tone for a collaborative culture,” says Saarelainen. “This includes letting the team know that failure is okay — it's part of the process of trying something new.”

At UNHCR Brazil, leadership has demonstrated a keen understanding of the importance of innovation and its willingness to give the team opportunities to collaborate and experiment with new ideas. Marquez, who is now Deputy Director for UNHCR's Regional Bureau for the Americas, is recognised as a true champion of innovation, especially during her time as Representative in Brazil.

“She empowers people to have a vision, and I think this is a game-changer in innovation,” says Feitosa. “Isabel has been a mentor to me and so many people in the operation. She set the tone by making innovation one of her priorities, which is a powerful message coming from a manager. It forces people to not only think of different solutions but to look at the problem in a different way.”

Nardi agrees, noting that rather than micromanaging the team, Marquez trusted them to move forward with any good ideas they presented. Often, he says, an effective leader will create

this kind of team-based engagement without thinking of it as being innovative — but that leadership style is crucial to sustainable innovation.

“Isabel's trust and empowerment was very important for the operation to grow so fast and keep our motivation to innovate,” he explains. “She included everyone in the operation in the process of creating and implementing new ideas. When people know their ideas will be taken into account, they will participate. Senior management recognised the work everyone was doing, and people are motivated by this and by seeing the results of their efforts.”

Opening the floodgates for innovation across UNHCR

The same principles UNHCR Brazil used to establish a sustainable culture of innovation can be applied by every UNHCR operation to create their own wave of innovation.

What's more, people who move around the global organisation — a common practise across UNHCR — can bring the principles of innovation with them to their new assignments. Innovation Fellows, in particular, play a significant role in this.

“The innovation mindset is something I am really carrying in my heart, in everything I'm doing with UNHCR,” says Feitosa. “Especially because I'm connected with many colleagues who are doing amazing work in the field, it's very powerful to be part of a community of people who share this mindset.”

Having been assigned to three different countries in the last year or so, Nardi also has first-hand experience in the value of spreading innovation from one country to the next.

“International colleagues bring new views and you can benefit from them, and they'll have other ways of working with partners, with the private sector, with the government,” he explains. “They will bring their best experience and we can all take inspiration from that.”

Across UNHCR, the pursuit of innovation will continue, with a commitment to embracing new ways that innovation can manifest in practise. After all, innovation means being nimble and adapting to the shifting tides of humanitarian needs — and catching the big fish requires flexibility and openness.

“Creating the kind of behaviour and culture change that will make a measurable impact on UNHCR and our mission means continually finding innovative ways to think and work together,” Saarelainen says. “When people are enthusiastic and willing to take initiative — and accept feedback that can improve on their idea, which might mean doing something differently — that's how innovation happens.”

Perspectives

By Hans Park,
Strategic Design and Research Manager



Throughout this year we have tried to examine our work (environment) by exploring different lenses to widen our minds. How we speak, how we behave, and what our core values bring to innovation have required us to not only look further into the future but to look in places that are normally dismissed, silenced or ignored. The number of articles describing the need for change and having a new look to solve challenges is a testament to how we approach our work. On top of the written text, we're presenting a different visual narrative of our environment in a way that encompasses a lot of the mundane, a lot of the humane - waiting, traveling, sitting down, and observing. The photo diary is a short collection of the mundane from our recent work in Rwanda and Nigeria.



View to Kigali from UNHCR's office



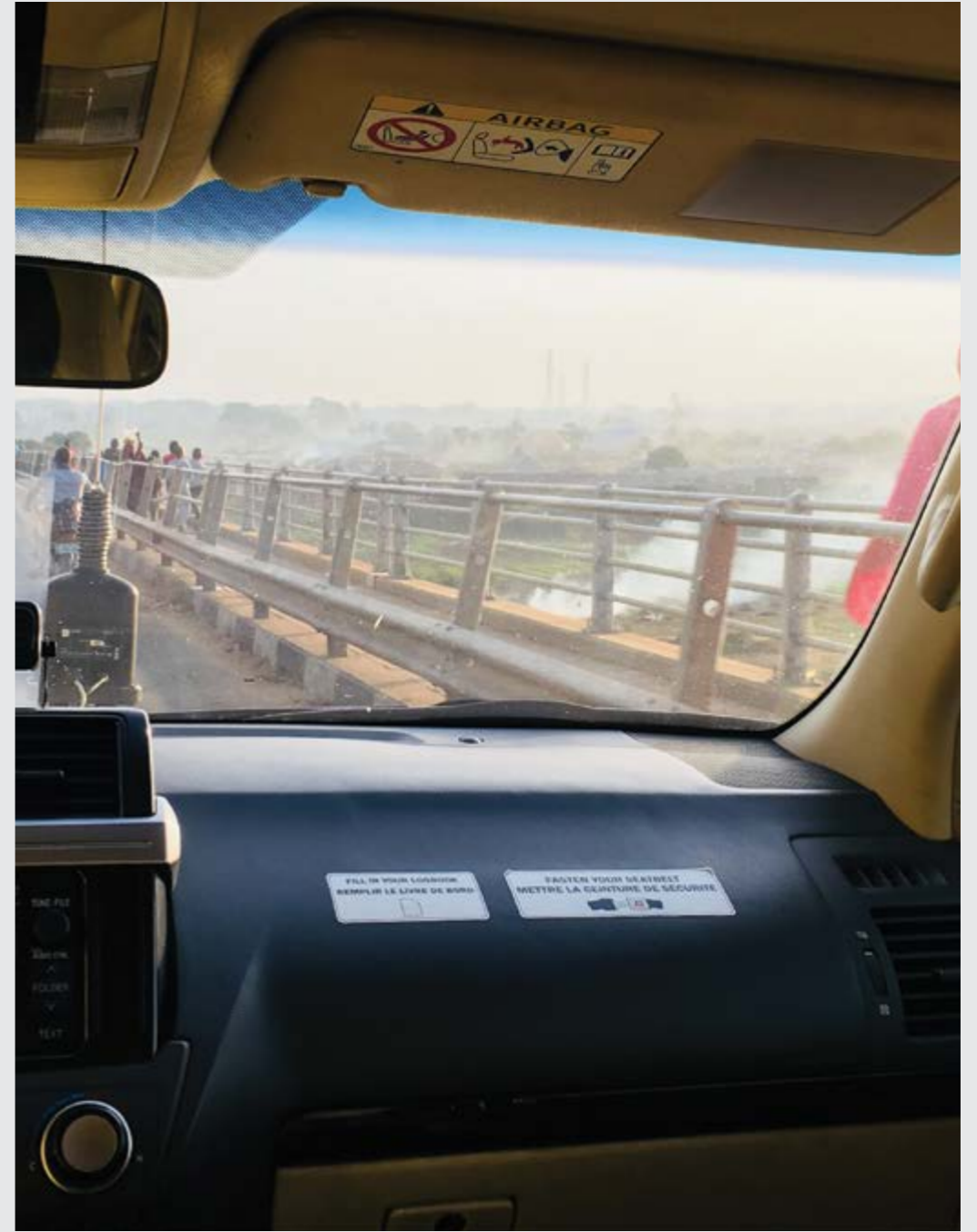
Democratic Republic of the Congo beyond, seen from Rwanda



Lobby spaces in hotels (Rwanda, Nigeria)



Market street in Ogoja, Nigeria



Crossing bridge en route to Ogoja from Abuja, Nigeria

Our experts are
dead, long live
innovation



By Katie Drew,
Innovation Officer &
Agnes Schneidt, Innovation Officer

Last year we killed our Innovation Labs. This year can be remembered as the year we bumped-off our 'experts'. Cut-throat, but necessary. Fortunately, no blood was actually spilled and we've all made it to the end of the year in one piece. However, some of us struggled more with this latest culling than others - namely those with perhaps a more pronounced 'inner expert syndrome'. Enter stage left Agnes and Katie - former energy 'expert' and communicating with communities 'expert'. This is the story of our grief, how we mourned our 'experts', how we have worked through it, and how we are now starting 2019 from a place of hope.

RIP Experts

The Marquis de Sade once stated that 'murder is a horror, but an often necessary horror'. For the Innovation Service this was definitely the case. The 'experts' had to go - their 'I've got the solution' and 'I have an idea' attitudes were incongruous with our innovation approach. We believe that by adopting an innovation approach, UNHCR can be more agile and adaptable. This approach allows us better to define challenges, test our assumptions, collaboratively design solutions, and crucially provides space for experimentation, failure, and learning.

As the Innovation Service, we've developed a range of resources on the approach. We've also invested in supporting our Innovation Fellows, through the Fellowship, to follow this approach to address challenges in their operations or divisions. But some of us 'self-declared experts' in the Innovation Service had to admit we weren't always practicing what we preached. We'd jump steps, in the process - speeding through

moments for collaboration and criticality. Our 'expert' lenses shaped the way we approached challenges. To paraphrase Maslow: when all you have is a 'communications expert' every challenge looks like a communications gap.

Denial or 'No change needed here, thanks'

Killing our 'inner experts' and dropping our 'but I'm a specialist' approach was no easy process. It started when our boss sent us a podcast on Captain Sully (our boss is prone to this). A line within this podcast hit home: 'Often we feel like the expert, and we think that we know better, even when we hear information or when we see evidence that speaks to the fact that we're wrong. And so having that learning mindset as we're gaining experience is so, so important'.

Being told you're wrong is difficult to hear - and clearly, the only reaction is denial! We immediately began to retro-fit our work, validating it against the innovation approach. We found ourselves justifying projects: No, we definitely followed the process for Boda Boda Talk Talk, we definitely challenged our assumptions in Nigeria, of course, we sought inputs from others in Uganda! We're fine, we don't need to change.

Guilt or 'Why weren't we more innovative'

As we stared at a list of challenges we'd scoped from a recent mission to Nigeria, a growing realisation that we hadn't consciously - or mindfully - followed the innovation approach crept in. Within the team, other people asked questions about the challenge that we hadn't explored - we hadn't thought to ask them. We'd asked our 'expert' questions: question A follows question

B because that's the way we've always asked questions, and defined 'needs and gaps'. We'd not necessarily applied a learning mindset, and only had a myopic understanding of the challenge. We were dripping equal parts guilt and dismay.

Anger or 'I've got a (fish)bone to pick with this innovation toolkit'

There are a wealth of resources on humanitarian innovation - from guidance and good practise, to toolkits and techniques. On first read, many of these resources seem very accessible - with diagrams, templates and tips for following an innovation approach. Simple instructions, providing advice on how to run a challenge definition session, or how to ideate are beautifully illustrated and make a compelling read. We wanted to (re)turn to these tools to help with the re-set: Katie and Agnes v. 2.0. What we didn't realise would follow was a stage of rebellion and anger.

On further examination of the toolkits, our reactionary response was: 'these tools are designed for white men in white men spaces'. We were infuriated by the proposition that Silicon-Valley brainstorming techniques - conducted in well equipped, air-conditioned meeting rooms plastered with sticky notes - had any place in the contexts where UNHCR worked. The sleek images and colourful designs became increasingly alienating as our frustration with their 'impracticality' developed. None of the tools seemed applicable and the 'innovation speak' really began to grate. We felt marginalised, frustrated and quickly dismissed any value the tools could have. How were we meant to conduct a fishbone challenge definition exercise in the back of a 4x4 in Diffa? Exercises involving comic book heroes, or a visit to Starbucks, seemed hegemonic and our now-cynical 'inner experts' definitely had multiple moments of resurrection.

Reflection or 'Om, we've found innovation mindfulness'

Overheard complaining about the tools and mourning the good-old days of being 'specialists', others in the team rallied to be our support network. They too spoke of their challenges and the weirdness they felt when using Silicon-tech speak in real-world settings. We realised that the tools didn't have to be used all the time, or indeed at all. What is important, is the process that each tool compels you to follow and for us to remember how it feels to occupy and operate in that part of the innovation process. If all the 'ideation' tools seem Western-centric, too-resource intensive and full of jargon, it's ok. The important thing is to focus on the purpose of the tool and what it is trying to achieve - the tools aren't innovative, the approach is. So, while you might not have six or seven different coloured hats in your backpack, nor a technicoloured range of large post-it notes and Sharpies on-hand, what is the purpose of the exercise and how can you recreate the 'conditions' with what you do have? Taking this mindfulness approach, and by fully attending to each part of the innovation process, we were finally starting to exorcise the ghosts of our 'expert' past. We were surprised when an 'ideation session' in Rwanda, with a group of refugee students, actually worked (although we still hated the terminology).

Upward Turn or 'Let's innovate on the process'

Even if we will never word bank (?) or brain net (?) with refugees, we need ways of practically working through the various elements of the innovation approach. If the tools we currently have aren't fit for purpose, let's change them, or develop new ones. Back in Nigeria, we experimented around this. We knew we wanted to generate solutions to a community connectivity challenge in Cross River State. The question was: how? How could we support a diverse group of stakeholders to come up with creative ideas to address a complex set of challenges

related to security, sustainability, ownership and access? Were our 'experts' truly dead-enough to avoid facipulating (the delicate blend of facilitating and manipulating) the discussion? Were we able to listen without our 'specialist' hats on? If you're looking for the answer, sorry, we don't have it - yet! The method we tested with this community wasn't successful at all. We struggled with gatekeepers, and translation, and 'mission creep'. We'd imagined we'd brainstorm solutions related to connectivity, but often found the ideas generated were more related to yam production and the establishment of a local market. We walked away with yams(!), but few concrete ideas from the community and no prioritisation or possible next steps. We did learn many things from this failure - including the importance of storytelling and analogy in this community. (Don't go 'chop' a male goat if you want de female goat to breed = pidgin for sustainability, or thereabouts).

Another experiment we conducted in Nigeria, was to take a user-journey approach to our market-scoping; this was a tool we'd initially been cynical of but wanted to test its application. Rather than taking a traditional assessment approach to the market (as we had previously conducted), we followed the 'journey' of a few market 'users'. This included tracing the steps of a market-trader and refugee market customers to a main supply market, exploring options to set-up our own stall, and questioning the lack of solar items on sale. As 'experts' we'd conducted market assessments before, but this time was very different. Focusing on individuals - rather than the market writ-large - enabled us to dig deeper into challenges. We were asking questions our 'experts' would never had thought to ask - we were learning.

Acceptance or 'Let's try dem new tings'

This brings us to a place of acceptance and excitement as we start 2019. Rather than being led blindly by our headstrong 'inner experts' we have the compass of the innovation approach to guide us. We've already experienced some

of the benefits of adopting this approach, opening the conversation up to a diversity of perspectives and creative ideas. An example includes the ideas we 'would never have thought of' generated through an idea-sharing exercise with colleagues, mobile network operators and representatives from the government in Nigeria. It's no easy task 'interpreting' hegemonic tools for real-world spaces - but, again, we don't need to be the experts here. This interpretation is best led with communities in the driving seat. Let's experiment in this space - or as our Nigerian community members told us 'try dem new tings'. We're committed to strengthening innovation with communities, and hope to co-develop practical, accessible, and effective tools to support us to do so. Some will be similar to concepts already well documented in various innovation toolkits, and some will undoubtedly be very different. Who knew that killing our 'experts' would have opened up so many opportunities to strengthen the inclusivity and diversity of our work, and also create some exciting new challenges?

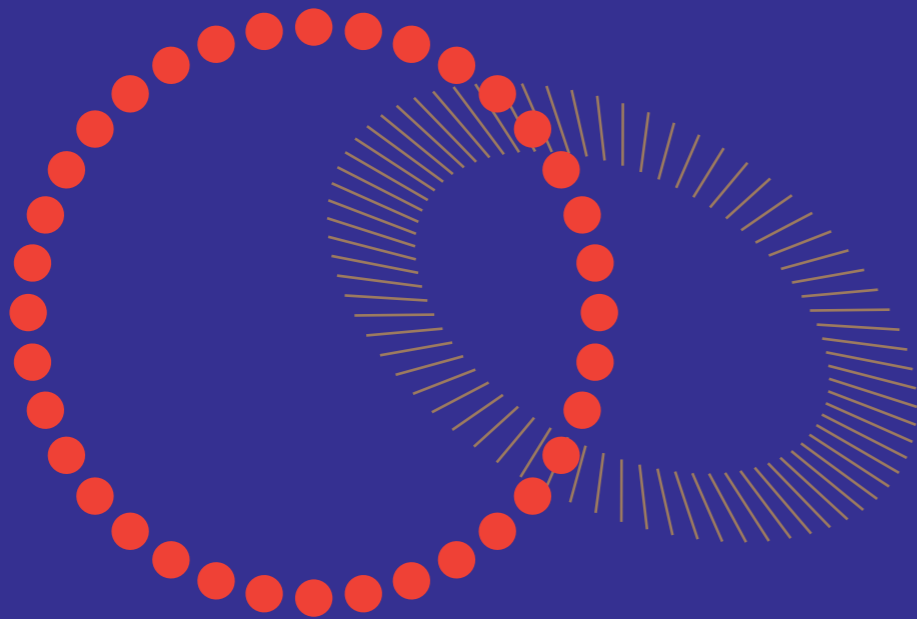
Disproving Oscar Wilde

Oscar Wilde claimed that murder is always a mistake and that 'one should never do anything that one cannot talk about after dinner'. We've proved him wrong. Our execution of 'experts' has definitely generated interesting discussions in our team, and more broadly as we encourage others to 'bump-off' their inner specialists. We're optimistic that removing our 'expertise' will open the door for new possibilities, new ideas, and better and more humble collaboration. For those who feel that their 'inner experts' are monopolising their way-of working, and crowding-out diversity of thought, we'd encourage you to pull the trigger. Afterwards, join us for brandy and cigars - let's have this after dinner conversation with a wide audience and share our learning.

Our experts are dead, long live innovation.

Humility over brand - rethinking social media for those on the move in the Americas

By Jennifer Brookland, Independent Writer



The way north is dangerous and confusing. Asylum seekers traveling through Central America to Mexico and the United States navigate a path that wends through vulnerability, exhaustion, exploitation and uncertainty. But they don't walk alone. A Facebook page that connects asylum seekers and migrants with "El Jaguar" provides a direct line to trustworthy information and a sense of solidarity.

El Jaguar is a Facebook fan page that provides asylum seekers and refugees with information and responds privately to individual questions. But instead of hearing back from an institutional account with all its branding and officialdom, those who turn to El Jaguar put their confidence in a character that is anonymous, yet somehow comforting.

"It's the figure of protection, of strength," says Francesca Fontanini, Regional Public Information Officer. Indeed, the Olmecs, Mayans and Aztecs all viewed the jaguar as an ally and protector, associated with the divine.

The El Jaguar page is a source of much needed information for refugees and asylum seekers as they journey north. It tells them where they can spend the night and find food and water, directs them to medical clinics and provides information about schools. As they cross borders and come up against new policies, laws and regulations, the page explains their legal rights and tells them how to correctly apply for asylum.

A new kind of campaign

Migrants and refugees get most of their information from other people: friends, family, former neighbors or people who have already gone to Mexico or the United States and are in touch with others back home. Word of mouth can feel comforting but can also be woefully out of date or inaccurate.

A second point of information is shelters. But then the information they receive can be inadequate or unhelpful. In some cases, it's a trap set by traffickers. Oftentimes shelters do not give out information about who can request asylum and how.

The lack of information, and the fact that many migrants don't realise they are asylum seekers or refugees, was apparent to Fontanini when she considered that out of the 450 thousand people who entered Mexico every day in 2017, fewer than 4,000 of them requested asylum.

UNHCR took on these communication challenges in the physical world through El Jaguar, placing signs along commonly used migration routes all the way from Guatemala through Mexico, and delivering stacks of leaflets to shelters, clinics and schools.

But in the digital world, El Jaguar takes on a life of its own.

"We post informational messages regarding rights, procedures, shelter, any other useful information when you are migrating or when you just arrived to that country and you're in need of international protection," explains Monica Vazquez, a senior mass information assistant who works for UNHCR in Mexico City and is partially responsible for monitoring the El Jaguar page.

People on the move can also send El Jaguar a direct message to ask a specific question. "You can always reach the jaguar, and we reply," says Vazquez.

When they turn to El Jaguar for answers, they get information directly from UNHCR in plain speak. The account is monitored by UNHCR staff during most business hours, so responses are quick and accurate.

And yet the institutional identity of El Jaguar is purposefully downplayed. Launching El Jaguar was a test for UNHCR to see if it could reach people who otherwise might not trust it enough to accept information and support.

"What happens if we detach from that brand? What happens if something or someone else is talking?" Vazquez asks. "The jaguar is like them, it's part of them, it walks with them."

An unusual fan page

El Jaguar may be addressing a longstanding need, but it's doing so in a surprisingly innovative way given that this is the first Facebook fan page Vazquez knows of that was set up as an information exchange. "Facebook is not generally a tool that is for informational purposes, and in this case, for protection," says Vazquez.

El Jaguar doesn't market anything. There's no product to sell. Although its foundation looks like any other Facebook campaign, reliant on strong images and helpful content to draw users, it is intended to reach a totally different audience.

"The type of content we manage and the people we're talking to are very different, and that makes the interaction and the community management of the page very, very particular," Vazquez says. "I've never seen a page behaving like this, ever."

The unconventional use of the platform is also UNHCR's biggest challenge since the team is always battling the algorithm. "Facebook is for people who want to be seen," says Vazquez. "We're dealing with people who want to hide."

And unlike other Facebook pages, Vazquez and the rest of the team measure the success of El Jaguar on its own terms. It doesn't matter how many "likes" the page gets—a main indicator for other businesses using Facebook—because as Vazquez puts it, "liking this page could put lives in danger."

Instead El Jaguar is being measured by how many people engage with it, and how long those conversations last. The site was launched in November 2017, and in its first year El Jaguar responded to more than 750 questions.

Some individuals have been in contact with El Jaguar for several months, getting back in touch with updates or as new concerns arise. For Vazquez, that is a way to see how the page is helping people make decisions about their best options.

Walking with the jaguar

One asylum seeker who journeyed north asked El Jaguar a question while he was still in his country of origin, which Vazquez keeps confidential for his security. He kept in touch with El Jaguar as he moved, until he finally reached Mexico and knocked on the door of a UNHCR field office.

"I'm here and I need help," the man said. "I followed every step this page gave me. The jaguar sent me here."

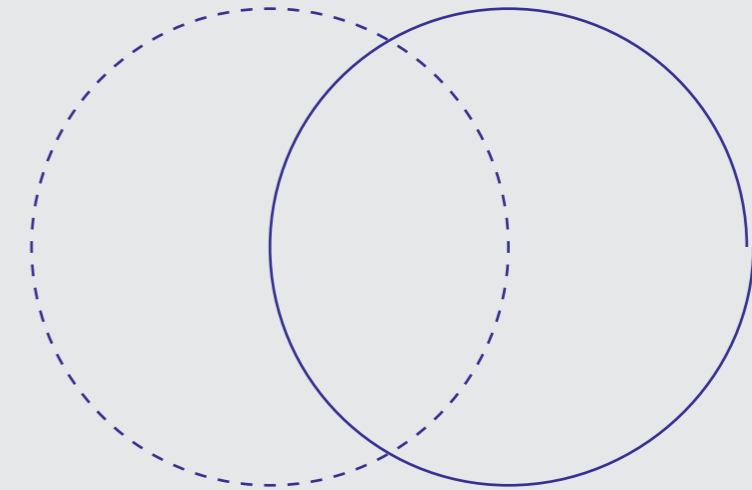
Stepping into the field office was the first time the man realised he'd been in touch with the refugee agency all along. Like others, he had put his faith in El Jaguar, a page whose lack of branding makes it nearly as anonymous as its users.

Their efforts are paying off, according to Fontanini, who credited the initiative at least in part with raising the number of people applying for asylum each year to more than 14,000. The number of questions posed to El Jaguar has doubled in the last month.

And UNHCR has also been joined on its journey to find innovative ways to help asylum seekers and persons of concern in Central America and Mexico: El Jaguar is now comprised of a coalition of organisations that includes UNICEF, the United Nations Office on Drugs and Crime, the International Organisation for Migration and Mexico's National Human Rights Commission (CNDH) and Commission for Refugee Assistance (COMAR).

El Jaguar will soon release additional content on its page, and conduct focus groups to better understand the kind of information refugees and asylum seekers need.

As they continue to listen to those they're tasked with reaching, El Jaguar will become a more trusted and widespread tool. "We have to really think outside the box, and the people of concern are the ones that are being novel in the end," says Fontanini. "I think a lot of inspiration and motivation comes from them."



"I'm here and I need help," the man said. "I followed every step this page gave me. The jaguar sent me here."

Stepping into the field office was the first time the man realised he'd been in touch with the refugee agency all along. Like others, he had put his faith in El Jaguar, a page whose lack of branding makes it nearly as anonymous as its users.

A melody for innovation

By Balint Pataki,
Admin Programme Associate

It was a sequence of single musical notes that fated my path to work at the UN Refugee Agency (UNHCR). A melody you may be asking yourself, seems a strange yet serendipitous catalyst to land me my position within UNHCR's Innovation Service. But to me – it makes perfect sense. While taking piano lessons a number of years ago, my instructor and close friend revealed one of his most recent songs that he had worked on. It struck me almost instantly – unveiling deep emotions and inspiring me to question the origins of the piece. He explained that he had written this song for refugees, our brothers and sisters that had been displaced. The conversation eventually led to a revelation that UNHCR in my home country of Hungary was hiring and that I could have the opportunity to support the same people that inspired his song. I handed in my application for a position in Human Resources, and a few months later, down the beaten path, I arrived at UNHCR. Five years later – here I still am.

Music as a point of connection

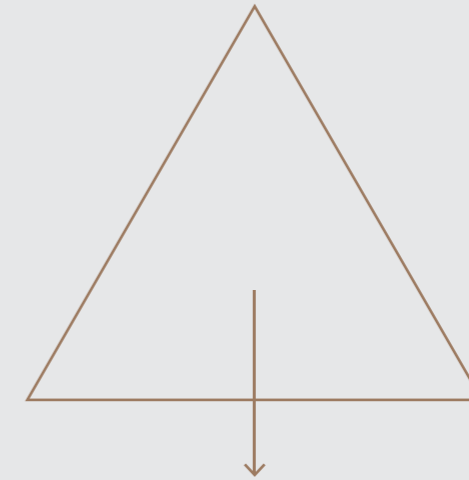
Most of us hear music shortly after our birth, often via lullabies, and through many of the most remarkable occasions and moments in our lives. When we hear a beloved song we often can use it as a cognitive point of reference to a specific time. Music has a particular ability that seems to bring people closer to each other. It is a shared experience we can attach ourselves to across cultures, religions, and countries.

Consequently, it seems undeniable that performing music through various means such as

singing, playing instruments or simply just dancing, can easily connect communities. This story of a refugee from the Central African Republic called Simplice tells us that in spite of all the inhuman circumstances that he had to go through while fleeing persecution, he still managed to find refuge in music. Simplice is a musician and an eternal optimist. In the camp, he founded Handimusic, a band featuring fellow displaced and disabled musicians. Together, the group tried to use music to bring joy to the camp and to spread messages of peace. Music is their refuge.

Why am I speaking about music as a means of connection and inspiration you may be wondering? My role at the Innovation Service is Admin and Programme Associate. As you can imagine, a lot of my work is supporting administrative processes and tasks that can be cumbersome and tedious. However, as I slowly stretch my fingers over the computer keyboard (maybe thousands of times a day) it often reminds me of playing the piano, which then results in a natural process of working. This simple positive reference point brings me back constantly to a driver of creativity and serves as a positive distraction that contributes to my efficacy. Even within the most mundane tasks, this aforementioned distraction enables me to create an environment where each inevitable task acts as a driving force for our organisation.

When we think about innovation, we cannot contribute to new approaches if our mindset isn't centred in supporting the mundane. We've written about the promise of boring innovation



and the humdrum procedures required to support innovation activities in the field before. As my colleague, John rightly stated, "Innovation is portrayed on websites of humanitarian agencies engaging in this area (including our own!) as a flashy and polished thing to do at the heart of the action. What this doesn't capture is the day-to-day tedium involved in delivering even the best ideas, which can often include a lot of back-office work." This back-office work – while disparate to the work of other colleagues – should not also suffer from a lack of inspiration and creativity.

I have also looked towards my relationship with music to better understand how innovation can flourish. Composing and writing follows a similar process – in music we identify and face challenges, we experience failures (which I prefer to think about as learnings), and finally – sometimes – we create value.

Divergent thinking and creativity

Everything needs a good dose of creativity. I don't think many people would argue with this. Even Einstein's son recalled that "whenever he felt that he had come to the end of the road or into a difficult situation in his work, he would take refuge in music, and that would usually resolve all his difficulties," (quoted in Clark, 1971, 106). Luckily, innovation and creativity are not reserved for the lucky few geniuses. At the Innovation Service, we believe that anyone can innovate if given the right tools. And while music certainly fuels inspiration and creativity for many – how else can it contribute to innovation? Well,

the great thing about creativity is that it is key for divergent thinking – e.g. the ability to come up with new ideas. There is one study that explores music as a source for divergent thinking where the individual experiments measured divergent and convergent thinking with the backdrop of silence or classical music that evoked numerous types of emotions; these being happy, calm, sad, or anxious.

In the end, the participants who listened to happy music scored significantly higher on divergent thinking than those sat in silence. It didn't even matter if they liked happy music or not – there was no impact on performance. While the other types of music did not have the same positive effect, the authors suggest that the cognitive flexibility needed for innovation can be influenced by the music we listen to and surround ourselves with. The authors note, "Music listening may be useful to promote creative thinking in inexpensive and efficient ways in various scientific, educational, and organisational settings when creative thinking is needed."

So perhaps my routine of balancing administrative work with music is one method to fuel creativity in the mundane – but it is by no means the only route for finding joy in even the most boring tasks. I challenge you to find the harmonies of your own routine that can complement your day-to-day activities.

As the famous artist Prince said, "There is joy in repetition," – it's just about discovering it.

Innovation Fellowship: Driving innovation through mindset and cultural change

The UNHCR Innovation Fellowship is a year-long learning programme for UNHCR's workforce.

The Fellowship programme focuses on building Innovation Fellows' innovation skills and competencies in addition to supporting them to facilitate innovation with colleagues, partners, and refugees in their own operations or divisions. Over the course of the year, Innovation Fellows learn and use innovation methods, tools, and embed new approaches in innovation projects. They focus on problem-solving, ideation, and experimenting solutions to real-life challenges in the field or at Headquarters. They are the organisation's ambassadors for innovation and lasting positive change.

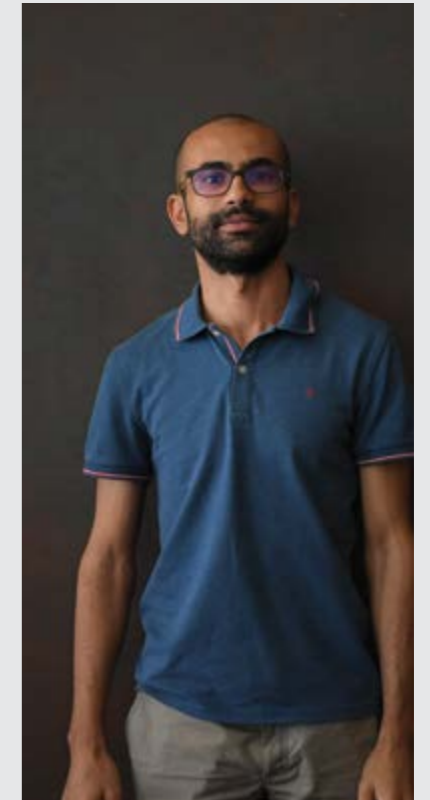


This page: Isis Nunez Ferrera
Opposite page: Pietro Tesoriero

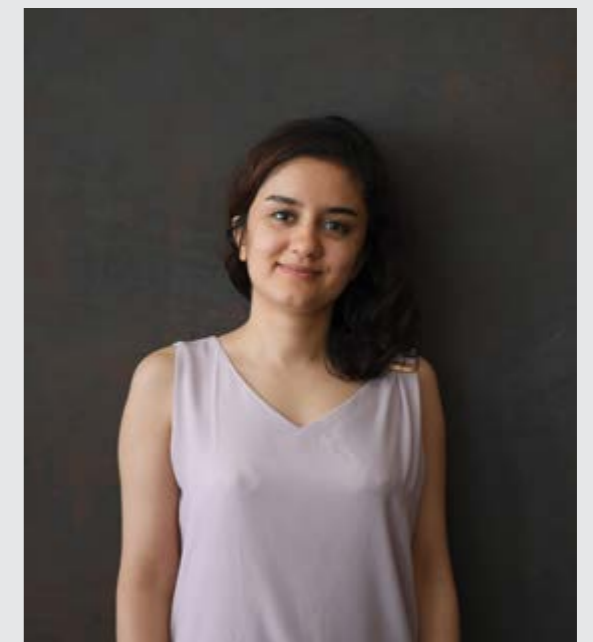
The Fellowship is grounded in the idea that to have sustainable innovation you need to focus on mindset change and culture. We believe the only way to achieve this is to change individual behaviours at all levels of the organisation. The programme encourages continuous learning, challenging assumptions, and perspectives, the value of collaboration and openness for failure and risk-taking. It is a mindset that leads staff to question if there is a better way of working, communicating, and thinking.

Another 25 staff began their journey in 2018. The new cohort of Fellows went through an innovation journey in their duty stations together with their colleagues, partners, and refugees. They also participated in two workshops, one in Bangkok and one in Istanbul, where they learned about experimentation, positive influencing, and how to create better outcomes for their operations and UNHCR's constituency.





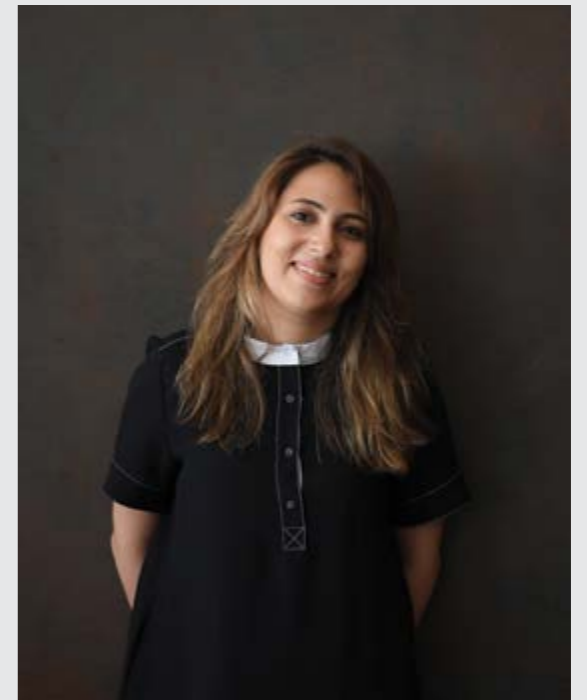
From top left: Clarisse Ntampaka, Amor Chandoul, Judith Chan, Marzieh Shafieihanjani



From top left: Vinicius Feitosa, Issack Hussein Hassan, Melron Mwaba, Abdul Razak Jaweesh



From top left: Rujia Yang, Nouran Yehia,
Harrison Lanigan-Coyte, Diego Nepomuceno Nardi
Opposite page: Zeru Maru



From top left: Ipek Miscioglu Kuruuzum, Sebastian Herwig, Alessandro Pasta, Tatiana Lovtsova

Opposite page: Zoe Campiglia, Ivan Kwesiga, Peter Fitzmaurice, Shiva Ershadi

Exploring the undefined borders of innovation

A note from Ailadi

This year we have partnered again with the wonderful Ailadi to work on illustrations for our online and printed publications. Her work can be found in the Innovation Service's latest communications work including in the 2018-2019 Orbit publication, The Arc Medium publication and our latest publication on inclusion, diversity, and gender equity.

In this publication, in addition to Ailadi's work, many articles are supported by diagrams that were co-created with the authors and influenced by general notions of continuity and disruption in the space of innovation in the humanitarian sector. The disruption - or the small dislodgement seen in the diagrams - represents the possibilities for the vectors and shapes taking a different path. This new trajectory opens structures for influence and ideas - allowing innovation to thrive and move across spaces in the humanitarian sector.

We have also decided to couple articles with images from NASA and ESA, two large space agencies, to elicit the emotion of wonder and feelings of exploration and quest.

This past year it has been a pleasure to collaborate with UNHCR's Innovation Service. A pleasure because the dialogue with Hans and Lauren is engaging and always expanding to look at things with fresh and critical eyes. It's an active exchange in which I'm inspired by their concepts and thoughts, and the sketches I do in response are, for them, inspiring interpretations of complex problems the humanitarian innovation sector is facing.

The thematics we approached were varied; from facing the challenges of innovation within UNHCR and the need for a different approach

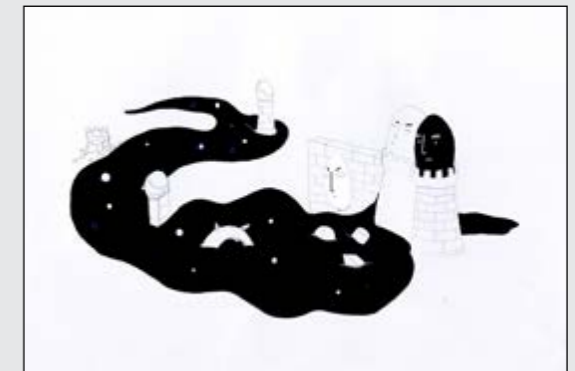
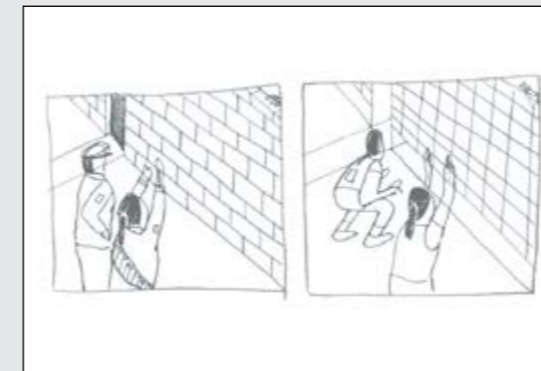
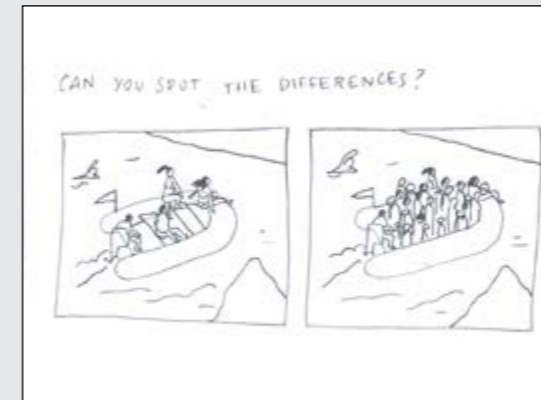
to communication, to the positive and negative nuances found when working in a diversified team, and the rise and fall of human and machine-made borders. We chose to talk about the different subjects with different visual styles, so each time we could define a language that would embody the contexts and the specific stories and concepts.

Illustrations are often the result of a process by which the final metaphor used by the illustration is the result of a ping-pong of suggestions and feedback. For this publication, my initial idea on how to represent the difficulties of innovating for the refugee cause could easily be misinterpreted by the target audience, so we moved to a safer and divergent solution.

The original concept for the illustrations was that solutions might emerge in these black, opaque, oily substances that is also guessing what will work in the future. I interpreted solutions as living opportunities that can be worked on by UNHCR to then be transmitted to refugees as a tool for them to appropriate for their own agency.

My opinion is that illustrations can have a larger impact if they are dissociated from a specific context that triggers objections and considerations that move the attention away from the intended message. This consideration made us discard another series of illustrations playing with the "find the differences" game. In one example there were two inflatable rafts, one with a tiny group of people in swimsuits while the other is crowded with people on the move. The idea was to juxtapose the paradoxical nature of borders but it was instead pointing the finger on inequalities of our system.

The final illustrations for this publication represent a present world whose borders are blurry



and pushed by researchers, explorers, and visionaries. Outside the present, the future is still unexplored and white in the illustration - undefined yet, to be created.

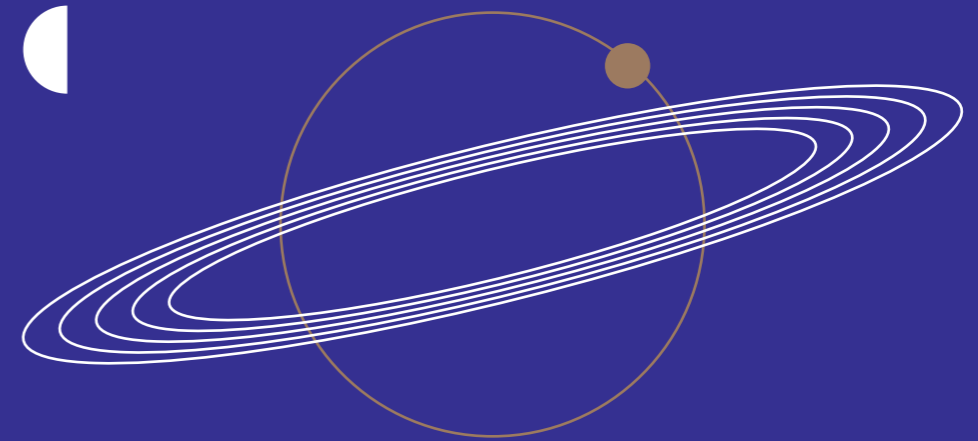
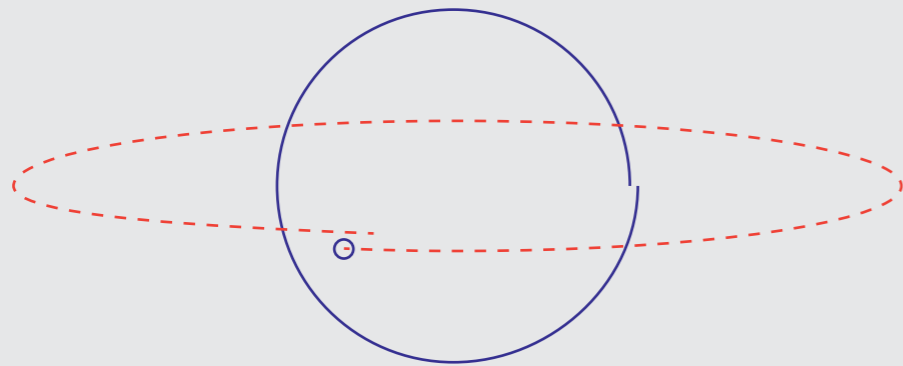
'Creepy illustrations' above and sketch of communications below.

The status quo poses itself as the way things are. The status quo requires effort from the people that feel, imagine, and desire it to be different to share their vision and let others first peek into a different state and then embrace it.

On the cover, you find people living on a flat world - the reality is not the same for everyone, caused by conditions of which we might not even be aware. Then a sensibility or a sense of justice and curiosity pushes some to peek into the other 'realities' and blend its borders.



Annex



Our Values

1. Humility, Respectful:

The team is composed of members who are equally valuable in the work they do in the team, and are aware there is always room to grow, so long as the criticism is shared respectfully and with the intent of improving the team's overall performance.

Questions to ask when implementing this value:

- Am I creating an environment that fosters respect and humility between team members?
- Are people comfortable giving constructive criticism? Are they able to give and receive constructive criticism?

2. Diversity, Inclusive, Empathetic:

The team prioritises diversity of thought and emphasises the importance of making space for the voices of those who are often marginalised and silenced in the workplace.

Questions to ask when implementing this value:

- Am I alienating anyone in making this decision? Whose is it? How can I include them?
- Are all voices and opinions taken into account when making this decision?
- Am I making space for everyone to give input?
- Does the work we do collectively employ everyone in the team efficiently and inclusively?

3. Curiosity, Drive to learn, Common Vision:

The team is curious and eager about the work that they do and the infinite possibility to grow and learn from such work, and will continuously work towards a common vision that compliments and unites each of the team members' individual visions for the team.

Questions to ask when implementing this value:

- Is the work that we were doing feeding our passion? Is it inhibiting it?
- Is the work malleable enough to allow room for growth, learning, and bettering, or is too restricted to a particular vision?
- Does our vision allow room for diversity of thought? Is it restrictive?
- Am I helping to build a culture of relentless curiosity around our work that is also inclusive of the feedback from our users?
- Am I challenging conventional wisdom by questioning well-established assumptions?

4. Transparent, Open, Honest, Communication:

The team will make room for communication of individual opinions, concerns, and grievances truthfully, openly, and effectively in hopes of fostering a transparent environment both within the team specifically, within UNHCR more generally, and outside the UNHCR more widely.

Questions to ask when implementing this value:

- Is my decision concealing information that should otherwise be available to the team, the UNHCR, and/or the outside community?
- Is my decision leaving space for feedback, input, and grievances to be shared?
- Am I communicating in a way that is transparent, honest and reflects the openness we share as a team?
- Am I communicating in a way that values the merits of mistake-based learning, and when appropriate, sharing my failures and lessons learned with the broader humanitarian community?

5. Collaborative, Supportive:

The team enables people to contribute to and support initiatives that aim to further the team's efforts in achieving its shared vision. The team is composed of members whose attitudes and work approaches support the participation of each team member, opening up space for all voices to be heard, and new partnerships to be formed.

Questions to ask when implementing this value:

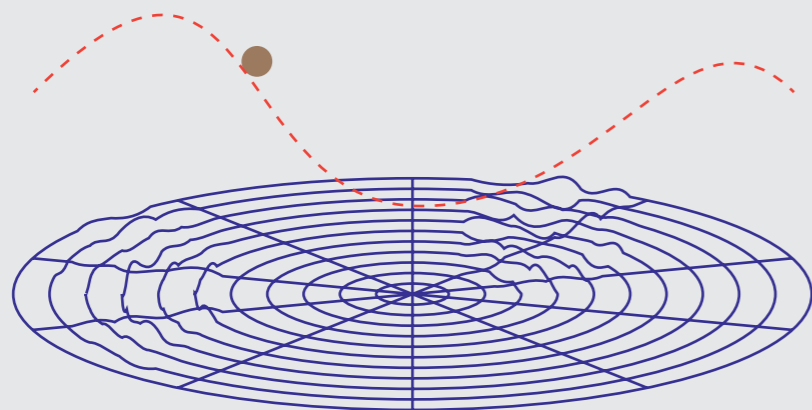
- Does this decision foster a collaborative and supportive environment?
- Is the decision making process itself collaborative?
- Is my work supporting an approach that is people-centric and enabling everyone to do their best?

Innovation in UNHCR: A starting guide

What is innovation?

Innovation is the process of translating an idea or invention into a good or service so that it creates value.¹ Innovation is an iterative process that identifies, adjusts, and diffuses ideas. The innovation process utilises a set of tools and methodologies through which to solve challenges and identify opportunities. It's non-linear, it's experimental, and it is robust. Innovation is not simply technology, it is not only for the younger generations, and it is not something only a few people can do.

¹ Business Dictionary: <http://www.businessdictionary.com/definition/innovation.html>



Why is innovation important to UNHCR?

Innovation is important to UNHCR because it makes us more agile, more open to collaboration, and more effective for the people we serve. This not only needs to continue, but innovation as an approach needs to become increasingly central to how we solve problem, address challenges and prepare UNHCR for the future of forced displacement.

Innovation is about creating value for refugees, introducing novel solutions, and doing things better.

Whilst the prime cause of our work has not changed, the scale and the nature of the issues we seek to address has. We cannot hope to solve them with the old solutions and ways of thinking. Hence our ability to innovate becomes a core competence – new ideas, new ways of thinking, new ways of engaging and relating become critical. - Caroline Harper, Senior Advisor - Inclusion, Diversity and Gender Equity

Who innovates in UNHCR?

Anyone in the organisation can innovate if they wish, regardless of age, nationality, position or gender. Innovators have a creative mindset, attitude, an ability to see things differently and to bend the boundaries. They have a desire to solve complex challenges facing our organisation - given the right tools, each person in the organisation has the power to create change.

Why do we need to create space to innovate in UNHCR?

In order to create sustainable innovation in UNHCR, we need to focus on mindset, culture, and collaboration. Everyone can be an innovator, but no one can do it alone or without an open approach to teamwork. This requires that managers at all levels of the organisation encourage and create the space for staff to innovate and experiment in their day-to-day work. The innovation mindset UNHCR is trying to foster is challenging assumptions, changing perspectives, instilling the value of collaboration

and openness for failure and risk-taking; this cannot be done without space for innovation.

Why do we need partnerships for innovation?

Partnerships allow learning and the exchange of expertise and intelligence between industries, allowing said industries to co-create solutions effectively. Diversity of stakeholders should define the partnership pursuit process. It is not exclusive to the private sector, but also to the expertise of other UN agencies, academia, local partners, and most importantly, refugees themselves.

What is the role of UNHCR's Innovation Service?

UNHCR's Innovation Service creates an enabling environment for innovation to flourish in UNHCR by facilitating spaces to innovate, capturing bright spots, and ensuring that innovation is accessible to staff and refugees so they can increasingly draw on innovation to solve the most pressing of challenges.

Practical Examples from UNHCR's Innovation Service:

Low-tech innovation: UNHCR's Innovation Service worked closely with colleagues from the Uganda operation and the surge Emergency Response Team to address information sharing issues in BidiBidi, a then newly established refugee settlement in Northern Uganda following the escalating violence in South Sudan. Inspired by Internew's Boda Boda Talk Talk, the team worked closely with refugees to develop an innovative solution to information sharing in the form of a motorised bike carrying a speaker that simply blasts out information throughout the settlement. It is important to note that innovation does not equal technology and the success of this project lends itself to the importance of refugee-led and inclusive innovation.

High-tech innovation: Project Jetson is a platform aimed to provide UNHCR operations predictions about population movement (arrivals/departures) for specific regions or countries.

Jetson – a machine-learning based application – measures multiple variables to see how changes over time that affect movement of UNHCR’s persons of concern, particularly refugees and internally displaced people. This experimental project was launched by UNHCR’s Innovation Service in 2017 to better understand how data can be used to predict movements of people in Sub-Saharan Africa, particularly in the Horn of Africa.

Fostering a culture that is ripe for innovation:

The UNHCR Innovation Fellowship is a 12-month learning programme for UNHCR’s workforce. The programme focuses on building Innovation Fellows’ innovation skills and competencies, in addition to supporting them to facilitate innovation with colleagues, partners, and refugees in their own operations or divisions. Over the course of the year, Innovation Fellows focus on problem-solving, ideation, and experimenting solutions to real-life challenges in the field or at Headquarters.

Supporting innovation across UNHCR operations with a safe budgetary space:

The Innovation Fund is UNHCR’s funding mechanism for innovation-driven projects. It is part of a wider effort spurred by UNHCR’s Innovation Service to support innovators who wish to bring their ideas to life, to experiment and test their assumption in UNHCR’s operations. The Innovation Fund creates a safe budgetary space that enables field operations to experiment and take risks without having to deprioritise other areas of work. In supporting such innovations, the Innovation Fund seeks to catalyze an appetite for experimentation so that operations begin investing their own resources when it comes time to scale projects.

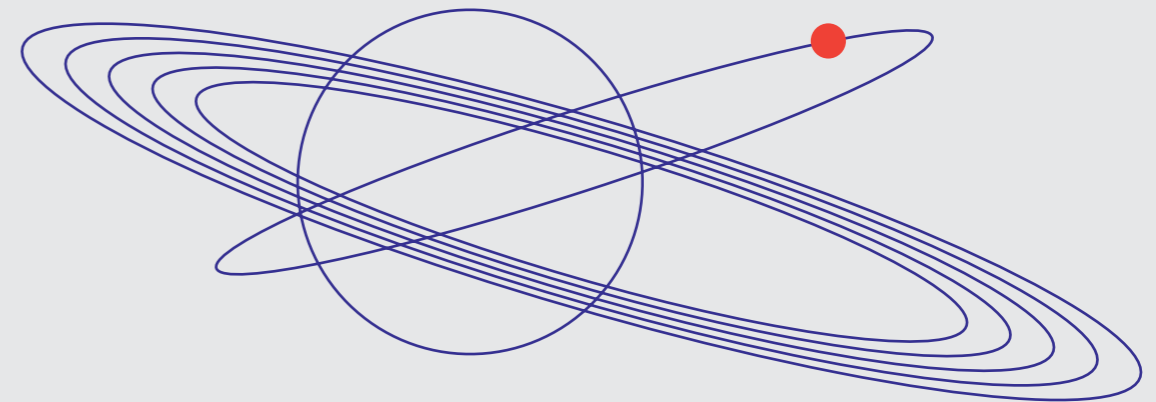
Creating values-based partnerships and innovation:

We need non-traditional partners in order to work in an innovative, and radically different manner. Partnerships can truly benefit UNHCR and create value for persons of concern when values are shared, and they allow for core competencies and experiences to attend to the current needs and context. This approach was ingrained in UNHCR’s Innovation Service’s partnership with the Community

Technology Empowerment Network (CTEN), a community-based organisation created by and for refugees. UNHCR’s Innovation team directly supported the refugee-led NGO in Uganda in hopes of increasing CTEN’s capacity to share information and awareness for refugees around key issues involving safety and protection. The partnership advanced recently when CTEN’s Co-founder and Executive Director travelled to Geneva to present on the importance of experimentation, refugee-led innovation, and failure in the world of innovation at UNHCR’s annual NGO Consultations.

Creating agile partnerships across the United Nations:

We need to break down barriers between UN institutions and create a system that is ripe for forming agile partnerships around challenges that need to be solved at scale. These partnerships facilitate an exchange of ideas and promising practices, but also lessons learned, failures, and a better understanding of what an evidence base for success looks like in humanitarian innovation. UNHCR’s Innovation Service’s partnership with UN Global Pulse, a flagship initiative of the United Nations SG on big data, is excellent example of how partnerships can be quickly and informally established, and how new skill-sets and tools catalyze innovation. The partnership was initiated when UNHCR’s Winter Cell reached out for support to test the feasibility of monitoring trafficking/smuggling routes through social media. The Global Pulse team were quickly able to share expertise and provide tools where there were clear synergies and comparative advantages of working together. Importantly, they were willing to experiment, fail, and adapt with the Winter Cell and in turn, UNHCR’s Innovation Service. The partnership, built on transparency and collaboration, has continued to evolve through new experiments and UN Global Pulse is a key partner of UNHCR’s Innovation Service. This collaboration remains ‘informal’ - to date, there is no specific partnership agreement in place - but this has not hindered the effectiveness of the partnership which continues to yield creative and effective results for both teams.



Innovators have a creative mindset, attitude, an ability to see things differently and to bend the boundaries. They have a desire to solve complex challenges facing our organisation - given the right tools, each person in the organisation has the power to create change.

A brief innovation glossary

Creativity

The use of imagination or original ideas to create something new.¹ Tendency to recognise or generate ideas.

Imagination

The ability of the mind to be creative or resourceful.² Imagination is the heart of creativity.

Invention

A new, unique or novel idea, device, method, process or discovery.³

Inventor

Someone who comes up with new ideas and concepts that may or may not lead to innovations.⁴

Intrapreneur

An employee who innovates within an organisation. The practice of developing a new venture within an existing organisation, to exploit a new opportunity and create economic (or other) value.⁵

Innovation

The process of translating an idea or invention into a good or service that creates value.⁶ The implementation of a new or significantly improved product (good or service), process, a new marketing method, or a new organisational

1 Oxford Dictionary

2 Oxford Dictionary

3 Strategic Management of Technology and Innovation. CTI Reviews.

4 Lean Ventures International AB

5 Gifford Pinchot

6 BusinessDictionary

method in business practises, workplace organisation or external relations.⁷

Innovation process

We have a five-step process: 1) Understand and define the problem or opportunity; 2) Identify solutions (search for existing solutions and create new ones); 3) Test potential solutions; 4) Refine solutions; 5) Scale solutions. The process is not linear and it is not considered complete, as we seek to continually iterate.

Prototyping and testing

A prototype is a small-scale, tangible representation of an idea or solution (or part of it) that people can directly experience. Prototyping allows you to communicate your idea or solution to others in an interactive way, try ideas out quickly and gather feedback easily. The prototype is tested to make sure it is fit for the purpose and users' need. Based on the feedback, the prototype is improved and tested again.⁸

Radical (or discontinuous) innovation

Innovations with features offering dramatic improvements in performance or cost, which result in the transformation of existing markets or creation of new ones.⁹ New to the world.

Incremental innovation

An improvement or refinement in performance, cost, reliability, design, etc. to an existing product, service or process. New to the organisation, but not to the world.

7 OECD

8 TD4Ed - Teachers Design for Education

9 Innovation-3 consulting agency

Disruptive innovation

An innovation that transforms an existing market or sector by introducing simplicity, convenience, accessibility, and affordability where complication and high cost are the status quo.¹⁰

Agile

Agile is a project management methodology that uses short development cycles to focus on continuous improvement in the development of a product or service.¹¹

Design thinking

Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success.¹²

Service Design

Service design is a process in which the designer focuses on creating optimal service experiences. This requires taking a holistic view of all the related actors, their interactions, and supporting materials and infrastructures. Service design often involves the use of customer journey maps, which tell the story of different customers' interactions with a brand, thus offering deep insights.¹³

Human-Centered Design (HCD)

Human-centered design is a creative approach to problem-solving. It's a process that starts with the people you're designing for and ends with new solutions that are tailor made to suit their

10 The Clayton Christensen Institute

11 CIO

12 Tim Brown, CEO of IDEO

13 Interaction Design Foundation

needs. Human-centered design is about building a deep empathy with the people you're designing for; generating tons of ideas; building a bunch of prototypes; sharing what you've made with the people you're designing for; and eventually putting your innovative new solution out in the world.¹⁴

Social Innovation

A social innovation is a novel solution to a social problem that is more effective, efficient, sustainable, or just than current solutions. The value created accrues primarily to society rather than to private individuals.¹⁵

Open innovation

An innovation process in which the ideas are contributed from members outside of the organisation and from the public at large.¹⁶

Piloting

A pilot program, also called a feasibility study or experimental trial, is a small-scale, short-term experiment that helps an organisation learn how a large-scale project might work in practice. A pilot provides a platform for the organisation to test logistics, prove value and reveal deficiencies before spending a significant amount of time, energy or money on a large-scale project.¹⁷

Ideation

A structured process to generate a lot of ideas, preferably in a relatively short time frame. There are many different ideation techniques, e.g., brainstorming and empathy maps.¹⁸

Brainstorming

An idea generation (ideation) technique. Process for generating creative ideas and

solutions through intensive and freewheeling group discussion. Every participant is encouraged to think aloud and suggest as many ideas as possible, no matter seemingly how outlandish or bizarre. Analysis, discussion, or criticism of the aired ideas is allowed only when the brainstorming session is over and evaluation session begins.¹⁹

End-users

Individuals who ultimately use or are intended to use a product or service. End-users are the starting point of the innovation process.

Facilitation

Facilitation is about taking a leadership role in innovation process (instead of content). The facilitator remains "neutral" meaning he/she does not take a particular position in the discussion. Innovation facilitators help to unleash the creative potential in people who own the content by creating and managing the environment so that each individual is able to contribute their best.²⁰

Product innovation

Changes in the things (products/services) which an organisation offers.

Process innovation

Changes in the way in which they are created and delivered.

Position innovation

Changes in the context in which the products/services are introduced.

Paradigm innovation

Changes in the underlying mental models which frame what the organisation does.²¹

14 DesignKit by Ideo.org

15 Stanford Graduate School of Business

16 Wharton University of Pennsylvania

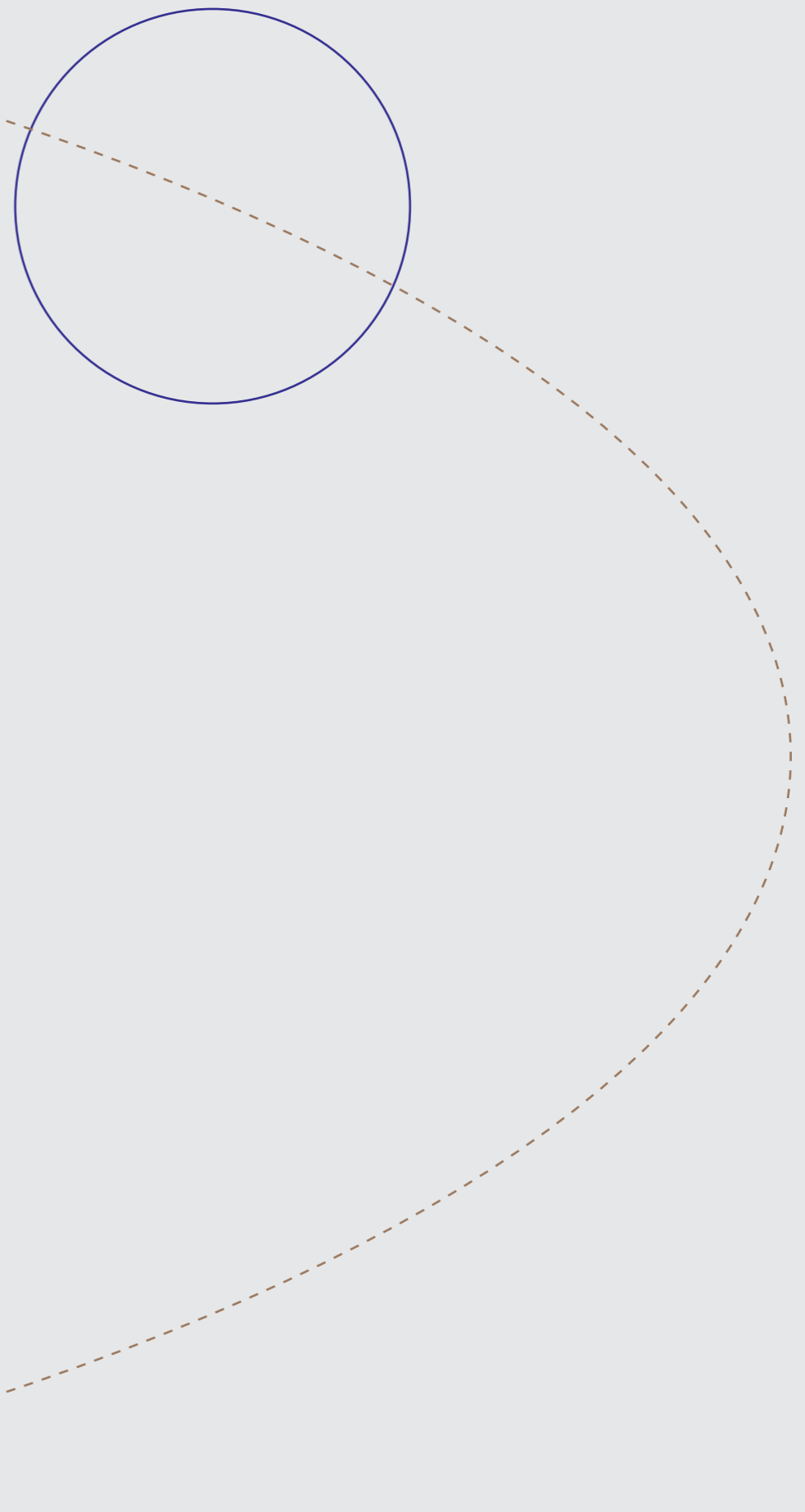
17 SearchCIO.com

18 Lean Ventures International AB

19 BusinessDictionary

20 The Creative Problem-solving Group Inc. Understanding the Role of a Facilitator

21 4Ps of Innovation by ©2005 Joe Tidd, John Bessant, Keith Pavitt



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UNHCR
The UN Refugee Agency