The impact of new technology on the ability of organizations to provide humanitarian assistance

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I would like to start by saying that in the past two missions I had in Iraq - you have heard what happened in Mosul - I saw a good example of how we could use technology to change the way we did business there a little bit in terms of accompanying the return of Iraqis who had fled Mosul: starting a cash for shelter program, which used mobile money. That ability to use mobile money gave so much more flexibility to the people we are paid to serve. For them it was important to be able to take ownership of the way they did the return and the way they rebuilt their houses. That was a positive example of how we could use technology to help people have more ownership and more control over their lives.

Taking a step back in Jordan, by the time I left, we were using Iris technology for refugees to get their cash assistance by going to ATMs and scanning their Iris and getting cash. Now, it's my first time living in a place like Switzerland. Here, I don't use my Iris to go to the ATM and cash money. So it was quite a step forward. These were positive examples. They
are not without risks, but today I actually want to take a step back and focus on what is right before technology. I’m very happy that there’s a very good presence of ICRC there, because ICRC has been quite the leader in dealing with this kind of responsibility, the responsible use of technology and how we can use technology, but also the pitfalls that it might represent and how we should be careful with it.

I wanted to take a step back and say that today we are close to 70 million forcibly displaced people between those who are internally displaced and those who are refugees. The amount of refugees in the world is 438 times the population of Sanremo and 312 times the capacity of San Siro football stadium. It is quite a sizable proportion of the world and only 16% of these refugees are in developed regions. Most refugees and displaced people are actually displaced in neighboring countries, and actually suffer from major challenges.

For us, the main question is: “how can we provide solutions that cater to the wellbeing and dignity of forcibly displaced?” This is what we’re trying to solve when we talk about delivering services. How can our team, the innovation team, provide solutions? That’s the starting point. If I were going to leave you with one message today, I would want you to remember what we do in innovation. For us, innovation is not equal to technology, innovation is not simply technology. It is not only for the younger generations and it is not something only a few people can do. There are people who can confuse the terms innovation with technology. People build apps and use block chains and drones to deliver services and they think of that as innovation. Additionally, there are some other people who think that innovation is all about ideas, when, in fact, it is more about delivery, people and process. For us, innovation is about action. Without implementation, ideas are just ideas and ideas alone are not innovation. Responsible actions refer to respect of humanitarian principles and the ethical values of our organization. I think our colleagues from ICRC will talk about it, but I think the underlying theme for us is the “do no harm principle” and I’ll come to that later.

We can see that there are maybe four dimensions to innovation. One is product innovation that is, producing new things like products, for example, drinking water filters or a website, or an app. There is a process innovation, which changes in the way in which we create and deliver, for example, Ford’s production line or the cash assistance programs. These are process-oriented innovations. There is also position and policy innovation, for example, recently Uganda allowed refugees to have access to SIM cards, so they made a decree and they changed the law. Now, refugees can have access to SIM cards using the refugee status condition they have. That
was a change in policy which we see as innovative. And also there is paradigm innovation and those are the mental models that we change, where we shift, for example, low cost airlines, that's a paradigm change. We are changing the whole spectrum of what we do a little bit.

Our proposal for you today is to focus on innovation and not technology to deliver humanitarian response. Humanitarian needs are only going to grow and the resources available to us are not likely to match that need. We work in places where there is no running water, no electricity. Technology, therefore, cannot solve all the needs of all the people we serve. Technology can definitely not solve all the needs and has many pitfalls. But when solutions are centered on people, they become sustainable. This is the main premise of innovation. When the values that underpin our attitudes and behaviors as humanitarians drive innovation, we can better focus on our efforts, and create more impact with less. And we're going to have to, because we don't have enough resources. Innovation is important for us because it makes us more agile, more open to collaboration and more effective for the people we serve. This will help us deal with future forced displacement.

So, there are certain factors and variables that govern displacement in the future. Climate Change is one of them as it exasperates displacement. It's one of the stress factors for countries with a history of protracted conflict. Somalia is a good example. In Somalia we are using artificial intelligence with piloting uses of artificial intelligence to predict movements of populations. This is one example of how we could be using technology positively, but we didn't jump to that, we wanted to predict displacements and, therefore, we identify the problem and we're only using technology as a means to an end and not an end by itself.

Another phenomenon is the mixed migration flows we have now. Look at what happens in Libya and the mixed migration flows to Europe, or what's happening in Venezuela. We increasingly have challenges related to mixed migration. The third element is the rise of extreme nationalism and the usage of, let's say, social media and technology to exasperate negative emotions and negative feelings towards vulnerable populations. Another element is increased surveillance by state and non-state actors, who use more and more personal data of individuals and there is a risk of using personal data of individuals who are extremely vulnerable.

So, for this reason, we want to share certain principles or ideas; prospects we consider are needed to design better solutions; and deliver appropriate humanitarian response. These prospects create value to those who are forcibly displaced and provide sustainability to the solutions
designed and implemented. Those solutions could either use technology or not. So what are those five prospects?

The first one is: question your assumptions and co-design with the people you serve. One of the common issues when designing any solution for humanitarian response, technology-based or not, is that people designing those solutions need to be humble enough to question their assumptions. When delivering a response, the first thing we need to do is to ask the people we serve if our solution is appropriate to their needs. And, ideally, and I emphasize this point, we should co-design any solution with them. Make them part of your planning and inputs when you're designing. I'll give you a negative example that I faced in Zaatari, in Jordan. We had a startup that came and wanted to use 3D printing for prosthetics; so they said “we're going to bring our 3D printers and print prosthetics for disabled people in the camp.” My question was, “did you actually speak to the refugees in the camp? Did you speak to the health authorities in Jordan and establish?” There are specific protocols that govern the whole process of users of prosthetics. None of that was done. They thought they had found the solution, which was 3D printing and, of course, maybe 3D printing was great, but that is only a part of the solution. So that didn't really go far.

Maybe a good example was given by the UNHCR biometrics team regarding the use of technology. The team noticed that refugees were curious about what was collected from them, when we did our registration process with refugees. You have the same curiosity when you're in an airport, when the airport officials collect your fingerprints and you cannot see what is on the screen, so you're standing on one side of the screen and you don't know what's happening on the other side. So, when we were testing our iris scan technology, we realized that there was something missing, because the client was not really seeing the process. This is a minor tweak, but today our colleagues in the field have the guidance that when we take the iris scan of refugees, refugees need to stand side by side with our colleagues and, therefore, they can see exactly what's happening and we explain and we should explain to refugees the process of us capturing the data including the iris scan.

The second prospect is to adapt response to the appropriate context. Technology solutions should always consider the constraints and limitations of the context as well as cultural appropriateness for solution. I'll give an example. There's a tendency to do hackathons. These hackathons are events where developers and other experts in technology gather and in 48 to 72 hours they design the solution. We're not really big fans of these hackathons, because it feels that they are not involving those of concern. Those people who we are paid to serve, need to be at the center
of a solution. And a solution cannot be the best solution unless it’s tested together with our clients. And so a lot of these hackathons happen in a silo, in a bubble, and that bubble doesn’t include the clients. I’ll give an example of a very, what you might consider, a low tech solution, namely, the Boda Boda Talk Talk. We basically had information gaps in a large camp. We put the radio, basically speakers, behind the motorbike, the motorbike would go around the camp transmitting the same message in a large distance and would stop along the way because people would listen and then have questions. So we used low-tech to handle misinformation and lack of information. This is just an example of solutions that do not necessarily amount to the high tech solutions that people usually think about when we talk about solutions.

The third prospect is design solutions with risk and mitigation measures. Another common pitfall and particularly concerning technology solutions is that some of the solution designers do not focus on risk and potential mitigations when they are implementing them. They focus only on the novelty of the solution rather than the potential risks the solution can create or the dependencies that they might generate. For example, the Distributed Ledger Technology (DLT) or what is now commonly known as blockchain. This has been considered one of the most promising technologies of the century. It’s essentially a shared database filled with entries that must be confirmed and encrypted. The name blockchain refers to the blocks that get added to the chain of transaction records. Each data entry is dependent on a logical relationship to all of its predecessors. Blockchain technology has proven to be successful in the case of financial transactions, and to tackle corruption. There are people who now suggest the use of blockchains for holding personal data record. Again, blockchain needs to be understood and studied before you’re able to say that blockchain is a solution. So, I'm just inviting you to think about it. When we think about blockchains, we should be thinking first about the problem that we're trying to address and also look at the users of the blockchain.

One opportunity here is cash assistance. A lot of studies prove that cash assistance is a positive methodology used to provide assistance. However, we should constantly take into consideration risk and mitigation measures on cash, starting from the introduction of additional liquidity and, therefore, inflation, the security measures for distributing cash and then also, behind this, the management of the identity of those who are receiving cash, how we mitigate the risk with mobile operators who have access to some of the components of the identity. These are important aspects to consider.

We should be focusing on agency and accountability. Agency refers to the capacity of individuals and collective groups to act independently and
make their own free choices. Accountability is about taking account of, giving account to, and being held to account by the people we serve. We have to break with the idea that we are best suited to design technology solutions or solutions in general, more than the people we serve. So, again, we must consider the issue of including our clients in the process of finding solutions.

Five: stronger policies that protect people, particularly data protection. We tend towards data protection, which is part and essence of the way we manage the confidentiality of the data of the people we serve. We do have a data protection policy and this is something that we want to emphasize. So, the stronger your policies are on data protection and the more elaborate your systems, the easier it will be to use technology while mitigating the risks.

Basically for us, these are the five prospects that we would want you to consider when designing and implementing technology solutions, and maintain a response. One: question and validate your assumptions; two: focus on agency and accountability; three: design with risk and mitigation measures; four: adapt response to appropriate contexts; five: strengthen policies, especially in this set up on data protection.