Transcript

Innovation, Technology and the Changing Face of Development

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Nick Ishmael-Perkins:

Good evening. My name is Nick Ishmael-Perkins and I am the director at SciDev.Net which is an online news service focused on science and technology for developing countries, and I am delighted to be here this evening to have what I think is going to be a very interesting discussion about the application of technology for development, and particularly around the context of UNICEF programming.

Before we get into the substantive discussions of the evening just a few housekeeping things. I should let you know that the discussion this evening is going to be on the record. We are not expecting any kind of fire alarm, so if the alarm does go off you should probably head for that door, I have been assured. It would be good if you all remembered to put your phones on silent, and we are going to start by a few remarks from the two speakers this evening.

First I have here Erica Kochi, who is an adviser on innovation to the chief executive for UNICEF and is one of the co-founders and co-leaders of UNICEF Innovation, and Erica previously worked with UNICEF in their global communication campaigns around immunization, avian flu, and a number of other children-focused programmes. She has also lectured at a number of Ivy League universities, including Harvard and Yale, around technology and its application and development. And on my right side is Chris Fabian, and Chris is also a co-founder and co-head of UNICEF Innovation and the special adviser on innovation to the chief executive at UNICEF. Chris has worked in the private sector in a number of countries and has also taught in Lebanon. Now, I understand that they actually are rarely together in the same place and that they don't always agree, so it could be a very interesting evening indeed. I am going to start by inviting Erica to make a few comments.

Erica Kochi:

Nick, thank you very much. As Nick said, we co-lead the innovation unit within UNICEF which is a $4 billion a year organization that works in 135 countries around the world in the areas of health, education, water sanitation, protection, and HIV/AIDS for children. I'm going to start telling you a story about early infant diagnosis and technology, and how many of the approaches we took on it, we have actually helped solve the problem, but how these approaches are applicable to the things that we're looking at going forward as well.

So, early infant diagnosis of HIV/AIDS. Essentially, a mother is HIV positive and even though she may be on treatment there is a chance that she can pass the virus onto her child. You can't test the child until about six months of age because the child will still have its mother's antibodies inside it. So the way you test the child is wait until six months, you take a pinprick of the heel, collect three small blood samples on a piece of paper that looks like a business card and collect all the other samples in a community and send them slowly up the chain to a laboratory which can then analyse them. In Zambia this is, from the most remote province called Luapula this is a 12 hour drive if you were going to drive straight. It obviously takes much longer than that for these samples. Then the lab needs to analyse them and send the samples back, going on the same path back to the community, the community health worker needs to find the mother, deliver the results, get the child on treatment.

Now, why is this important? This is important because by the first year of age if the child is not on treatment they have a 30 per cent chance of dying. By age two this goes up to 50 per cent. In Zambia the national average for this turnaround is 66 days. For Luapula province it's closer to a year. So you can imagine already where you can start looking at where technology can help this process, but I think it also shows that early infant diagnosis of HIV/AIDS is representative of many of the other problems within international development. The issues of transportation and distance, the issues of communication, the issues of recognition for those in the system who are performing well and the accountability for those who aren't performing well, and the general low expectations that everyone has of international development.

So, the system that we put in place, which is a mobile system which uses very simple text messages and community health workers, is now at national scale in both Zambia and Malawi, and what we did – when you look back on it is actually, it's probably not that impressive – we inserted technology at the right points of the system. We registered births, tracking children through their first years of life. We tracked the samples using SMS up through the system to the national laboratory. We sent the samples back using SMS, the results, and we sent reminders to community health workers to go follow up with mothers and we recognized their performance, we could see how they were doing because they were using this mobile system.

I think what's much more interesting is how we did it. This was not just health experts and government experts and all the implementing partners on the ground sitting together. This was bringing together people who aren't like us.

Designers, we partnered with our long time design partner, Frog Design, with local computer programmers, with community health workers themselves and with the mobile network operators, but this was all a few years ago, so we've applied this kind of thinking and this practice into many other areas, whether it's birth registration, tracking the distribution of insecticide treated nets, or monitoring nutrition.

I think what technology has really allowed us to do is have this kind of conversation about how you do it on a much larger scale and think beyond just the government services, more specifically just around early infant diagnosis, and think about what are the other barriers that people face that technology can really help break down, and what are the barriers that actually prevent people themselves from lifting themselves out of poverty? And the three big areas that we are looking at right now are, first of all, the areas of financial services. When you have people that can start to save and start to send money using technology, especially mobile phones, this changes everything. You can suddenly save for your children's future. You can make longer term investments.

The second area is transportation. I used an app on my phone to get a taxi here. You look at a city like San Francisco which has terrible public transport and there's so many start-ups there which look at ride sharing and trying to alleviate the problems of a lack of public services. For you and me this is important to get here, get to dinner, but for women it's important around the world to be able to get to a hospital, or to not have to spend three hours of their day collecting water, or for children to get to educational services. And finally the third area, which Chris is also going to talk about, is this issue of identity or having a voice. UNICEF released a report yesterday which says that one in three children are not officially registered under the age of five. This means that they can't access health services, can't access education services, they can't access citizenship and they can't access a right to vote.

When you think about the internet, which is probably the way we all think about technology, it was created so everyone could have a voice. Five billion people still don't have this access and I feel like there's a tremendous amount of opportunity for the corporate sector, for start-ups, to look at these three areas and to make a tremendous amount of money, but also really break down the barriers that are really preventing the poorest, the most underserved to help lift themselves out of poverty. So, I'll leave it at that.

Nick Ishmael-Perkins:

Okay, thank you. It's very interesting reflections on some key barriers and I think actually for those of us who are in the business of facilitating innovation and enterprise around innovation it's useful to have those kinds of problems articulated, and I'm going to hand over to you Chris.

Christopher Fabian:

Thanks Nick. It's really strange. Erica and I, I think, have spent two weeks in the same physical location over the last year, so it's really nice to have that time and to reflect on some of these things. When we're thinking about giving people a voice, that's sort of an abstract concept that I think sounds nice at an abstract level, for us it's really a direct link to creating a generation of people who can solve the biggest problems in the world. That means giving young people access to information, access to opportunity and access to choice in their environments, because the issues that we work on are so big that we can't solve them ourselves. These are things like climate change, things like education around the world, which we know we're not teaching kids the right skills that they need to survive in 1990, much less 2013. Issues like emergencies.

Last year UNICEF responded to 280 emergencies around the world. Ten years ago that number was about 80, and certainly that's because we've ramped up our emergency response machinery, but it's also because we're hitting more and more of those climate-related disasters and the impact of them is bigger. And so we really believe that building a strong generation, and it's a very selfish reason, I think, that we do a lot of our work because it's building this generation of problem solvers in the most difficult parts of the world that will allow us to tackle some of these big problems.

And if we're looking at development, we know that we're not doing our job right because we still have our job, right, we should be trying to put ourselves out of a job and I mean this in a very sincere way, it's easy to say but we should be trying to construct situations where we are no longer the ones making the change, because at least in our team everything we build in New York fails, we have a 95 per cent failure rate for things constructed in New York headquarters. That's a little higher than usual because our team is 10 people and we operate kind of like a start-up, so we not only have those failures, we have them very quickly, they're fast failures and they're cheap failures and we talk about them. It's a little higher than normal but I'd posit that it's not that much higher than normal in the space of development.

And the reason we're failing is that we're not building solutions at the point of need. We're not building systems with the people who need them, we're building things for. We have these terms like the global south and beneficiary, which are pretty horrible terms if you actually think about an interconnected world where things like a food, fuel and financial crisis affects not only everybody around the world, but affects people in the most difficult to reach areas even more than it affects those of us with strong social safety nets. And when we are looking at our job, our team spends about 60 per cent of our time focusing on problems of right now, problems like the ones Erica described, whether those are issues of identity and birth registration or delivery of supplies, we spend about 30 per cent of our time looking at the near future, at the three to five year horizon, and about 10 per cent looking at redesigning development. At least that's the mandate our boss gave us, and he also told me if I ever wear a tie he's going to fire me, so I'm pretty happy!

But in that three to five year future space and looking at what's coming, we wanted to take a little bit of time tonight to highlight three things that we see are important changes, phase changes that need to happen at UNICEF, in the world around us and in the world outside of the development world, because we are a sort of introspective bunch unfortunately. And there's three changes, three things that we see as really bellwether, are that first of all we have an option now, we have an opportunity and we have a need to engage in global problem solving. The issues that I described, the issues that Erica talked about aren't going to be solved by one group of people who think in one way in one country, and when an issue affects a lot of countries, something like climate-related disasters, it's not going to be the smartest person in the world who fixes that, it's going to be a collection of people who are inspired to work together.

We've seen this in the work that we're doing with universities around the world. Last year we opened up a challenge to a quarter of a million university students to try to approach UNICEF issues in a new way. In a year and a half that number will be 10 million university students, and we think that by connecting people along a set of principles and giving them access to the world's toughest challenges we can create real change. We have 12 innovation labs around the world and these labs function like start-ups. It feels like going into a Silicon Valley start-up, except in Burundi with a little bit less electricity.

But we've also seen in real life the impact of that work, when Hurricane Sandy hit New York – and I know I'm talking a lot about emergencies but it's present in our head because of the work that we're doing right now in the Philippines

– but when Hurricane Sandy hit New York, FEMA, the Federal Emergency Management Agency, rang us up and said that we were the first person they wanted to call, which is scary, and I said that on the phone, I was like, wrong number! That we were the first group that they wanted to call because they thought that the stuff that's being developed in the UNICEF innovation lab in Burundi or South Sudan where you have lack of access to transportation, lack of access to lift, where you don't have power, you don't have communication, could apply really well in Staten Island. And so we were able to start brokering this movement of innovations from the global south to New York, and suddenly you see that the whole polarity of this discussion has a potential to change and we as UNICEF with these 135 country offices have a pipeline of the most exciting and valuable problem solvers in the world, people who are doing the coolest stuff in the world, even before they know they're doing it, and that's a huge realization for us.

The second thing is around the idea of open source. This is possibly the biggest lever and the biggest idea of our generation. The fact that not only can you solve problems globally but you can do it in a way which doesn't keep that information to yourself, which actually promotes a sharing of that information, and which values the ability to pass knowledge from one node on a network to another, more than it values the ability to keep that knowledge is totally transformational.

When Uganda, Malawi and Zambia solve issues of early infant diagnosis or of figuring out where pharmaceuticals are, and they're doing it in this UNICEF Innovation Network, they are solving problems globally. The stuff that they produce is open source and publicly available. And last year we saw Nigeria pick up that same system that Erica described, that moves test results, and apply it in national scale in Nigeria, the most populous country in sub-Saharan Africa for birth registration, for birth reporting. Every birth that happens in Nigeria is now reported via text message in real time, which is a capacity that doesn't exist almost anywhere that I can think of in the world, Estonia maybe. Anyway, the reason that that was able to be picked up and applied in Nigeria is because the fundamental thinking behind that project, that system, was that it was developed locally by young software programmers, but that it was developed openly and it was in a global repository. And that shift, and we call it south-south, but it's not, and that's another one of these words that's kind of sticky, but that shift in thinking about problems and solutions is going to be the only way we solve the really big problems.

And the third thing is that we know we need new ways of funding this stuff. Just as patronizing as the idea of a beneficiary or the global south, is the idea

that any of us can plan three years into the future. It's patronizing and it's also wrong, and so when we're constructing these project plans where we're like, 'oh, I'm going to give you exactly my vision of the world three years from now or five years from now, and I'm going to need funding in this way because at the end the box will look like this', we're lying, it's not true. You cannot see three years into the future, especially when the world is changing faster now than it's ever changed before, and you can't fund something in a static paradigm; you can't expect that what you're funding is going to look the same.

We are very excited that we're starting the first ever venture fund – venture-like fund, I'll call it that, that kind of gives me a little bit of wiggle room – starting the first ever venture-like fund inside of the UN. We're starting a way for us to fund projects that are second stage projects in the way that a VC (venture capital) would fund, which is that you expect a lot of failure, you expect a lot of small investments. You expect that you can leverage really low liquidity markets, places like Burundi where people pay 20 per cent of their daily income just to keep their phone electrically charged, and you can leverage those and create a value pipeline of projects and ideas and problem solvers in those that you can, when they mature, apply globally. So that idea, that funding shift is important. It's important internally in UNICEF but it's important for our donors, for the people who are giving us money to start thinking about as well.

So, I think that between the most difficult problems in the world and the future, which gives us access to a generation of global problem solvers, we have a pretty interesting space to play in, and we really wanted to take the rest of the hour to hear from you to draw out some of the ideas more and to think through what the UNICEF of three or five years from now starts to look like. Thank you.

Nick Ishmael-Perkins:

Well, thanks Chris. There's a lot there to think about. Some big challenges I think actually for the development sector and the notion of being really clear about the solution at the point of need. Recently there were a set of stories actually around the Gates Challenge Fund around toilets, and the fact that actually they were investing in some toilets which were going to respond to energy efficiency but actually had issues around affordability, and it's the kind of thing where that sort of thinking as you're describing there could open up an interesting discussion.