









Interview with Debbie Rogers (REACH Digital Health (formerly Praekelt.org))

Ruth Terry February 20, 2023

Ruth Terry: Can you start by introducing yourself and telling me about the beginning of the project and the problem that you're addressing and how you're responding to it?

Debbie Rogers: My name is Debbie Rogers and I work for REACH Digital Health. We are currently rebranding, so it's a little bit of a strange time. We've been known as Praekelt.org for many years. Praekelt.org being the surname of our founder. We're busy rebranding to REACH Digital Health, so it's a little bit of a transition period in case you hear different names being thrown around.

Gustav Praekelt, our founder back in 2007 in South Africa, he's a South African and he saw the massive rise in mobile phone penetration and ownership, particularly in low and middle income countries and in Africa. In many ways at the time, low and middle income countries were ahead of higher income countries with respect to mobile phone ownership and penetration. He saw this as an amazing opportunity to reach people with personalized information, and at the same time realized that there were very serious challenges around inequality and poverty, particularly around health that needed to be addressed within these countries. He felt like perhaps with that challenge and that opportunity, there was a way that mobile technology could be used to improve the lives of people living in poverty.

That was how he founded the organization originally in 2007. It was very small. It was called Praekelt Foundation at the time, which was a little bit of a misnomer because we weren't a grant giving foundation, but we were sort of the nonprofit side of what he was doing as an individual. We really started with that one idea. And when looking at some of the challenges in South Africa, particularly as a starting point to prove that this kind of opportunity was a good one and would have an impact, he identified the HIV crisis in the country as one that was particularly important to address.

We still have one of the highest rates of HIV infection in the world, but at the time it was really causing major issues within the country. There was very little available with respect to









antiretroviral treatments, and only those who were most in need of it were able to access it. And there were still many myths and misconceptions around HIV and infection rates were climbing, not decreasing. It was something that was affecting huge areas of people's lives in the country, not only their health but it also had socioeconomic impacts as well.

He hired a person who had no technology background but had a background in HIV to work with people from his for-profit business, which was a digital media marketing company, to identify challenges and create simple mobile solutions to solve those challenges. So, we started off with some really, really simple solutions. For example, at one of the clinics nearby where we work in Johannesburg called the Helen Joseph Clinic, there was a huge problem. An organization called Right to Care was running a program to distribute antiretroviral medication to those most in need. And there was a huge problem with what was called "lost to follow up". So people would come to the clinic, they would get their antiretroviral medication, they might come multiple times and then for some reason, unknown to those people who were at the clinic, they would stop coming. It wasn't clear if they had moved and gone to another clinic, if they had perhaps stopped adhering to the medication, if they'd passed away. And so this was about 30% of people in their system who were "lost to follow up", which was a huge problem.

We did some investigation and looked at what could help [reduce "lost to follow up" cases] and how could we use mobile technology to prevent this? We developed a very simple appointment reminder system that just allowed people to be reminded of their appointments. They received SMS [messages] two weeks and two days before their appointments. Very importantly, it allowed them to reschedule their appointments if they needed to by sending a free message and somebody would call them back to reschedule.

We are talking about 2008 here, so I know that this seems like something that is very common nowadays, but at the time it was not very common even in the commercial sector. We worked with Right to Care and saw that we had a reduction in "lost to follow up" from 30% to 6%. We were able to really create a service that was very simple but very valuable to the patients themselves who were having trouble.

If there was a transport issue, they didn't know how to reschedule. If they weren't able to come on a certain day, they might be ill or they had to work, they didn't know how to reschedule. They may have forgotten when their appointment was and didn't know how to find out when it was. They didn't know if they could arrive at the clinic on a day when there wasn't an appointment. All of these things were contributing to these "lost to follow up" [cases] and our system helped reduce them.









That was our first program in the space using SMS and please-call-mes. It was very simple technology, highly available to people even with the simplest of phones, free to use so that they didn't have to pay anything to be able to even reschedule their appointment. In many ways it has taught us many tenants to our work as we've moved through the years. Praekelt.org – and I'll refer to it as that because we are looking back – has done some really amazing projects. We have done things outside of health but ultimately always come back to health being our primary focus as an organization and only do health projects at the moment and will continue to do that.

We try to use very simple technology that is easily accessible, free or as close to free as possible for people to use, knowing that we don't want any barriers. The people we're trying to reach are the people who have the least expendable income, might have very basic phones, might even be borrowing a phone from somebody else, so we need to make sure that we can make this really, really cheap. We work at large scale, we use very scalable technology. That's been a big part of what's made us successful as an organization, the scale that we've been able to reach with our programs. We've worked with many, many different organizations from small NGOs, large international NGOs, governments at provincial and national level to implement these programs.

For a long time we acted a little bit like you might think of as a nonprofit agency in that people could bring to us their problems. For example, we worked with Girl Effect, an International NGO, and they would say, "We are really having a challenge because young girls need information around sexual health and there isn't an easy way for them to find it and they don't have a place where they feel like they belong and they can engage around that content. How can you help to solve this?" We would use human-centered design and create various different platforms from simple mobile sites to SMS or voice-based solutions. Anything that could easily be accessible to the target market through their mobile phone. What we did was very project-based.

Ruth Terry: Are you serving the same constituents that you were in the beginning? And maybe you could just tell me a little bit more about how you engage with them.

Debbie Rogers: We work primarily in Africa, but we have worked in many low and middle income countries, in Asia as well. But Africa is our focus. Being a South African organization, that is our focus. We are always trying to reach those who are most in need, those people who are reliant on public healthcare, those people who may not have access to healthcare, those people who really are most in need of the type of assistance that we can bring, so we have continued to target those people in all of our programs.

There have been some changes over time. We had quite a large focus on women and girls at one stage because of the makeup of our portfolio of programs. We had a lot of maternal and child









health programs and a lot of work with youth, sexual reproductive health and rights, which was focused on girls.

So we did have a strong focus on women and girls at one point, but we've also realized that it's not just women and girls who can benefit from our programs but, even if we do want the ultimate beneficiaries to the women and girls, we need to address men in our programs as well. For example, there's a huge challenge with young women and girls in South Africa still having the highest HIV infection rates in the country.

A lot of that obviously is based on behavior of the men that they're having sex with. So you can't just address the needs of the girl. You also have to address the needs of the man so that you can make sure that you're having the impact that you want to have.

Our focus is on directly reaching out to... we used to call them patients, we now call them citizens. The reason we call them citizens is you don't have to be ill to want to be healthy, and we don't just want to treat disease, we also want to promote health. So we can't call everybody a patient because they may not yet have a disease that needs to be treated, but they may still need health information or may want to live a healthier life or prevent a disease or prevent a pregnancy or all of these sorts of things. That's why we call them citizens, [we've] always been really focused on directly reaching out to these citizens.

A lot of other programs in the digital health space have that target market as the ultimate beneficiaries, but they will be working through some other kind of means. So they may particularly target health workers in order to help those who are citizens. We've always reached directly out to citizens and made sure that we can empower them in their own health journeys and do that at a really large scale.

We also speak to health workers and administrators at the National Department of Health and Provincial or State Departments of Health because we know that they are important in improving the system in which citizens will engage with the healthcare system. But we primarily start with the citizen as the main person we are speaking to. When we communicate to health workers and health systems, it's in an attempt to improve the experience of, and ultimately the health outcomes of, that citizen.

Ruth Terry: With all these different programs and adapting to the need that you're observing, is there one example that you feel really illustrates the impact of your work?

Debbie Rogers: Absolutely. I think the [initial] solution has led us to [to be] much more focused now. We were an agency who did lots of different things and we started to realize around 2018









that we had some flagship programs that had these core elements that were similar, that we believed were having the biggest impact and would have the biggest impact if we could replicate them at scale. Now, rather than doing lots of different projects in different areas or for different clients, we really focus on this approach. That's one of the reasons we are rebranding, to show we are not just an agency anymore, we have one specific approach and we can use that specific approach to help you to do that in your country or for your disease area or for your target market to make sure that we can improve health.

One of the best examples is one of our flagship programs called MomConnect. So MomConnect came from a maternal and child's health program that we started with Johnson & Johnson, USAID and the UN Foundation in 2011 to deliver stage based messaging to mothers. We were lucky enough in 2014 that the government of South Africa took this program on as a national program, which they wanted to integrate into their healthcare system.

The way that this works is that mothers who go to their first antenatal visit are signed up to MomConnect and they then receive messages through their phone in a stage based way. So when you're 14 weeks pregnant, you need certain pieces of information. When your baby is one month old, you need other pieces of information. Giving people the information they need at the time that's relevant to them in their pregnancy and in the growth of their child up to two years old.

They can receive this via SMS or WhatsApp. Both of these are highly available, cheap or free to use and very accessible to women who need it, who are in the public healthcare system. They can also respond to the messages and ask questions. This is fed through to a help desk where employees of the National Department of Health respond to the woman, either help her with a complaint she might have about the way she was treated at a clinic or a question she might have that she needs information about or directing her to a clinic if she has any kinds of danger signs or is in need of emergency help.

It's a two-way engagement between the mother and the health system. What we realized very soon was that, while mothers were feeling more empowered in their health journeys, they really loved the service and we were starting to see indications of change in behavior based on the information that they received and the motivation that they received.

Behaviors like breastfeeding, attending antenatal visits, uptake of family planning after birth, these sorts of things. We also realized that they were encountering really big problems at the healthcare facilities themselves. Our work is not meant to in any way replace healthcare facilities. It is an extension of the healthcare facility into your own home and into the palm of your hand, but it is there to refer you to the right service at the right time within the healthcare system.









So we started to address nurses directly. These were the people that mothers were coming in contact with when they were attending their antenatal visits. These nurses were often de-motivated and stressed, [they're] under enormous pressure. They didn't have the resources that they needed and they had challenges with being able to do the work that was needed. There's so few health workers in the system. Speaking directly to nurses, helping them with resilience content, helping them with professional development, helping them with training was a way to improve the experience of the mother when they came to the system. Then what became immensely powerful was realizing that we started to sign up literally millions of women. At one stage we had 80% of the women giving birth in public facilities in the country on the system. So really at a national scale in all of the provinces and serving a vast majority of the population who needed it. We've had over 4 million mothers engage with the program.

Ruth Terry: What insights or teachable lessons do you think could be taken away from your work and the systems you've been using to accomplish it that other people could use? What would you tell someone who wanted to do something similar or replicate a similar program?

Debbie Rogers: I think one of the most important things, one of the things we've been most successful at, is doing these things at scale. It's easier to do. There's a lot of evidence around the impact of SMSs for mothers who are pregnant. But that might have been done on a very small scale in a more controlled environment.

What we've been able to do is to scale our programs to national and even international scales. One of our programs is with the World Health Organization, we've reached 26 million people in 200 countries. So the scale at which we work is one of the things that sets us apart. And also one of the things that I hope people will be able to learn from and be able to bring to their work.

When we look at scale, there are a few things that we keep in mind and it's not always a perfect recipe, but this is sort of what drives us forward. It sounds kind of obvious, but always design for scale from the beginning. You'll often be asked to roll out a pilot or be thinking about testing something in a smaller environment so that you can then justify being able to scale something up. And there's nothing wrong with doing it that way. But knowing that you've got to design this thinking, "What would this look like if it was across the entire country?"

As an example, if you were designing for a specific clinic, they may have resources or infrastructure that other clinics don't have. So if you are designing for that clinic rather than for all of the clinics in the country, you may inadvertently be creating a project that's unscalable. So we always consider, what would this look like in the broadest scale? How can we reduce any barriers to entry? How can we ensure that it works at the lowest common denominator?









It shouldn't just work at the clinics that are more sophisticated. Does it work at a clinic that's rural? It shouldn't just reach those who have, for example, smartphones. How does it reach people who have very simple phones? Always trying to link back to what is the lowest common denominator that will allow us to reach people at scale, and designing for that specifically. You can always layer elements on it. Maybe where there is an electronic medical record system available, you could integrate that. Or where people do have smartphones, you can give them the opportunity to use something like WhatsApp. Always making sure that we're designing for the lowest common denominator and making sure that it's at scale. Designing for scale from the outset. Even if what you're doing initially isn't at scale, that's what you've got to be thinking about right from the beginning, otherwise you're testing the wrong thing.

The second thing is around partnerships. Partnerships are incredibly important. We work with digital health, but the people who are providing health to their citizens or the governments and other NGOs, it's really important that you have those relationships and that you are serving the needs of governments and NGOs and making sure that you are working with them to increase the scale or to increase the penetration of the program. That doesn't mean just asking them for something, it also means making sure that your program is serving their needs. In fact, that's the most important thing if you want to have a good partnership.

The other thing to consider with partnerships is to look a little bit beyond the usual. People will often think about NGOs and governments as the right partners, and they're absolutely critical. But we've developed partnerships with people like Meta and WhatsApp for example, to help to scale our work with Google and Amazon to help to scale our work.

There are partnerships beyond the traditional nonprofit partnerships that people might think about that have had an incredible impact on helping to scale our programs and helping to shape the space as a whole. Partnerships do need to be multi-sectoral. You need to think about what is going to help to scale, what is going to help from a sustainability perspective. How do you reduce the cost per person so that this can continue to be something at scale? Because the problem with scale is often the cost. If you scale something up it becomes more expensive, so how are you leveraging partnerships to make sure that you're reducing that cost per person, not adding to it?

How do you use partnerships on the ground to get to people and understand the impact of what's happening when you know, we're a little bit separated working mainly in this digital space on people's individual phones. I think that that's incredibly important.

Ruth Terry: How would you say that you measure success? Is it in the ability to scale? Is it like the number of people that you're reaching?









Debbie Rogers: Initially one of the main ways that we measured success was in the scale of our work. More and more as our space has evolved, as it's becoming more mature, there is a need for a higher rigor with respect to understanding impact. Just by reaching somebody doesn't necessarily mean that you're having an impact on their lives, that you're helping them to change their behavior or to get the right care at the right time. Initially we did start often thinking of success as, how can we scale this program? We also always integrate impact measures within our program.

We're constantly receiving feedback from people to understand if they've had any behavior change. We've run a number of randomized control trials on some of our programs to ensure that we have your most rigorous evidence of impact. We think of it as a model where we are continually getting feedback from users to make sure we're continually improving the platform in small ways, but also on a larger scale measuring impact with longer term, much more rigorous and more extensive studies that will allow us to show a really high level of impact or high rigor of impact for different people.

We always now measure, at least with user feedback, whether or not there's been a reported change in behavior and try to ensure that when we're implementing new programs or new approaches, that we also have a large scale randomized control trial to support that over the long period of time. It's challenging in the digital space because things are changing so quickly, yet randomized control trials take a long time and they need things to remain stable for that period of time. So there is a bit of tension between the technology space of wanting to move fast and improve constantly and take on new technologies - because that's going to make the work better and the need for really rigorous health impact research. We do see that there is this tension between the two and we do our best to work between those two worlds because we see the value in both of those ways of measuring success.

Ruth Terry: Can you tell me about a time when something didn't work? What absolutely didn't work and what did you learn from it?

Debbie Rogers: I've been working with the organization for 13 years and if we hadn't had any failures, I don't think we would be where we are. It's hard to pinpoint one that's the biggest, but let me use this more recent example, that's really informed our approach going forward.

During COVID-19, as an organization that reached out directly to citizens, we knew we needed to respond very quickly, set something up that was available at a large scale very quickly to help our government in South Africa. We built a WhatsApp chatbot within two weeks. It had the latest information, we worked directly with the National Department of Health and we scaled that up incredibly successfully, very quickly.









We had about 30% of the adult population of the country engaged with that program and many of them still engage with that program. So that was an incredible success. We also worked with the World Health Organization a few weeks later to launch their version. That was also an incredible success. There were 26 million people on that platform. But we also wanted to help other governments roll these things out as quickly as possible.

We had limited capacity, being an organization at the time of about 40 people, we could only [work on] a certain number of programs. Our hypothesis was that if we provided the technology and the content and we basically set everything up for a government or a local NGO to be able to run a similar program, that they would be able to update the content and keep it going and attract people to the platform. That would mean that there would be less involvement from us, but people could still have the impact that they needed to have. And we'd hope that would mean more people would get access to the service than we could really service by ourselves.

Very quickly, when we launched our South African service and the World Health Organization service, we got enormous amounts of interest from other countries. We had about 40 different countries apply to use our service, and in the end we rolled it out to 10 other countries within a very short period of time, about three months. So this all sounds like success so far.

Ruth Terry: You had a lot of success. More failures, please.

Debbie Rogers: The biggest problem was the difference between when we were running the entire program, like we were in South Africa where we had connections with the Department of Health. We were working directly with them and doing all of the implementation. And those countries where we kind of handed the technology and the content over and said "Go" to other people. The order of magnitude of difference in the number of people on those platforms was astonishing.

I told you we had 14 million people in South Africa. Our next highest was 100,000 people, and some of them were below 10,000 people, who ever engaged on the platform. So the difference between the ones where we were actively engaging and where we provided a toolkit - a very simple toolkit - to people to be able to take it on was massive. We realized that a lot of what makes what we do successful is not the technology or the content, it's actually the parts around it that you need to bring, like the partnerships, the recruitment strategies, the integration into health systems, the advertising, the ability to constantly innovate on the platform, get feedback and make it better.









These are the things that were making our implementation successful. The technology itself was just a very small piece of that puzzle. The content is also important, but also just a small piece of that puzzle. It really made us see, if we want to replicate and scale our work, we have to think differently about how we do that. We can't just say, "Here's the technology, here's the content. Come to a meeting once every couple of months and we'll help you with any problems you have." It doesn't get enough of the magic of implementing something at scale to our partners.

We thought a lot about, "Does that mean we have to implement every program? Does that mean we need to go in and create a 40-person organization in every country where we work?" At the moment we are saying no. We are saying we just need to think differently about how we empower our partners to do this work. We need to be able to identify the pieces around the technology and content that make something successful. How do we help people implement it from that perspective?

The reason we've decided to do that is because it's more sustainable to do it with governments and with partners in other countries than it is for us to do it. But also because we genuinely believe that diversity of experience makes better platforms. If we are doing everything ourselves in every country, we're not going to learn from others. We are not going to have that input from others who are doing things differently. That's ultimately going to mean that we're not going to have as good a product in the end.

So we've been thinking a lot about what it is about the technology and content that makes something successful and how can we empower our partners to do that? It was a hard lesson to learn because it was so exciting to launch in 11 countries and then to look back and say, "So few of these were successful," at a time when we really needed this to be successful. It was challenging, but I think it's been important in our growth as an organization.

Ruth Terry: Aside from funding, are there any additional challenges that you're currently facing that you haven't been able to overcome yet?

Debbie Rogers: I think the challenges are around the fact that what we do is quite different to a lot of the other digital health platforms out there. And governments are starting to see, and I'm talking about the governments we primarily deal with in Africa and Asia, they're starting to see the value of digital health. They are starting to digitize, they are starting to build up the capacity within their departments, within their systems, to be able to roll out or implement different digital health solutions.

But most of these solutions are focused on medical data and how do you get data from a clinic up to the national department so that they can make decisions, or how do you understand what









the profile of a specific person is, or how do you use data from a community health worker to improve their ability to reach out to the right people at the right time? These are very much focused on the health system itself and the data around the health system and not so much on communication to people who are engaging with this system.

It's a very different skillset. It's a very different understanding. It's a very different theory of change as to what you are actually trying to implement. And there are fewer governments who are thinking about that as a part of their strategy from a digital health perspective. So it is still a bit of a challenge for people to see the value in it, first of all. And second of all, if we are talking about sustainability and we're talking about helping governments to improve their capacity to do these sorts of things, we are further behind in our part of digital health than in other parts. Sometimes that creates a real tension because people are saying, "Well, I have an IT team, they can take over what you're doing."

Very little of what we are doing is actually just the technology itself. Helping our partners and the governments we work with to understand what goes into something like this, helping them to understand what it might mean to be able to run this at a national scale, that's still a challenge we're facing.

Ruth Terry: What do you think is most needed from governments or other partners to advance that kind of system level change?

Debbie Rogers: Well there are lots of things. It's going to sound strange, but marketing. Understanding we're reaching out directly to citizens and understanding how to get citizens onto a platform and engage with that platform is actually more in the realm of marketing, advertising and product rollouts than it is in the space of health.

Of course the data and the information that we send people has to be correct from a health perspective. We have to think about what the behavior change elements are. There's a lot of really great rigor around the health stuff. But being able to get people onto these platforms is powerful when there are lots of people. At a large scale, that's when it's particularly powerful. So understanding how to get people onto a platform like this, a digital technology platform like this, what are your recruitment strategies, what are your partnership strategies, what are your advertising strategies, what are your branding strategies?

These are things that in the for-profit space, rolling out a tech product, would be a huge focus for them. To know what makes it successful. But within the health space, that's not prioritized necessarily. There's a lack of understanding around that. There's a lack of skills around it. If there









was one thing that we could help our partners with that I think would make the biggest difference right now, it would probably be around marketing and advertising.

Especially in this age of misinformation, it's a big lift to get the right information into people's hands and to stop them from looking at the wrong information. People are out there spending a lot of money and effort to get misinformation out there. We need to be doing the same to get the right information out there, but it's not a skill set that has been thought about a lot within departments of health, understandably of course. But it's an important one.

Ruth Terry: How do you see your work evolving over the next five years?

Debbie Rogers: What we're really hoping is to do better at replication, better than we did with COVID-19. To be able to take the success of where we've implemented and do that with partners in other countries and do it effectively and efficiently. People shouldn't have to learn the lessons we've learned over the last 15 years to be able to roll out a new program in a new country. We want to be able to accelerate that learning to get things to people as quickly as possible, but we also want to empower them to run it, empower them to understand how it moves forward, empower them to scale it rather than doing everything ourselves. We think that is going to be the best and most sustainable way forward.

Over the next few years we have some quite ambitious strategies to implement very large, national scale programs in at least five countries in Africa, partnering with government and other local partners and empowering them to be able to take on these platforms and start to run them. It's a case of looking at not only how many countries will we be in, but how independent will those countries be in five years time once we've started rolling this out and empowering them and building their capacity so that we can move on to others while this community of practice is built up.

That's the major thing that we're focusing on in the next little while, how do we replicate as efficiently and effectively as possible with a clear understanding of the need for partnerships and sustainability in doing so and not just kind of parachuting in a solution, building up our own company and kind of rolling it out in each country.

Ruth Terry: Is there anything that we didn't cover that you wanted to share or that you feel is relevant?

Debbie Rogers: I think that the main thing, obviously with the rebrand, is it's a pivotal moment for us. This organization has grown for 15 years and we have learned so much. We've learned what works and what doesn't work. Mainly what doesn't work probably more than anything else. And









we now have honed in on an approach that has impact, is replicable, is efficient, is effective, and we want to make sure that as many countries as possible can take advantage of that.

One of the reasons we're rebranding is to signal to everybody that we're not losing our 15 years of experience, but we are packaging it in a way that will allow you to engage differently with us so that we can empower you to do things going forward. I think that that's a really important change for us.

I was appointed as CEO in 2021, so this is a bit of a transition from a leadership perspective as well even though I've been in the organization for 13 years. Not only has the digital health landscape evolved over the last 15 years, but as an organization we have evolved and we are now a more mature organization with a much more rigorous focus and an ambition to empower as many people as possible with health information. That's really how we are thinking about going forward.

Ruth Terry is an award-winning social impact writer based in Istanbul, Turkey, with bylines in Al Jazeera, BBC Travel, National Geographic, NBC Think, The New York Times, The Washington Post, Time, and more. Writing across topics and genres, she has covered everything from race to roller skating through a lens of social justice and equity.

* This interview has been edited and condensed.