Empowering a Distributed Workforce in Africa's Tech industry

A Conversation with Christina Sass

FLETCHER FORUM: *Tell us about the mission of Andela. What experiences informed you and your co-founders of the need to found Andela?*

CHRISTINA SASS: Our mission is to empower 100,000 young technologists to be technology leaders, and to lead the spread of the digital revolution across the African continent. As one of Andela's four co-founders, my approach to the model stems from understanding that public education is still woefully disconnected from market opportunities and the needs of employers. I have long been hyper-focused on how to force existing education models to prepare people for job opportunities that are available and realistic to them. The unique opportunity for Andela is this historic moment in time when we have all of the tools necessary to connect brilliant, talented people to wherever they're most needed in the world. We are looking to revalue talent wherever it is; we use the tagline, "Talent is evenly distributed but opportunity is not." Andela sought out a huge pool of open jobs that are most valuable on the international marketplace that people can do remotely, without debt, without leaving home, and without creating any brain drain. The single greatest opportunity with those criteria

Christina Sass *is the Co-founder and Chief Operating Officer of Andela, a company that recruits the most talented technologists across Africa and places them as distributed teammates with the world's leading engineering organizations. Andela's mission is to build the next generation of technical leaders in Africa, providing the continent's most driven, talented young people a pathway into the global economy. With headquarters in Lagos, Nigeria, Nairobi, Kenya, New York, and San Francisco, Andela is backed by the Chan Zuckerberg Initiative and Google Ventures, among others. Christina is a Fletcher alumnus (F09).*

is software development. We looked at how we could create talent pipelines into growing tech teams, allow brilliant young people to add value and soak up cutting-edge best practices within those teams, and then bring it back to the continent. This is the model that has emerged and evolved.

FLETCHER FORUM: *Can you expand a bit on Andela's model to connect technologists to Fortune 500 companies and other companies abroad?*

SASS: The model has three parts: select developers, level them up through master's level training, and then fully integrate them with growing tech companies. For selectivity, on the supply side we're looking at over 50,000 applications to the program for about 230 software developer slots. We're examining their problem-solving, logical reasoning, and drive—and we're refining the characteristics that make a great remote developer, constantly tweaking what those are and how to evaluate for them. For each recruitment cycle we'll have about 1,000 applicants and we'll hire between six and eight individuals who will form a cohort. They go through the rest of the four-year fellowship together.

The large majority of developers we hire (around 80 percent) have graduated from university with a degree in Computer Science or Engineering. After joining Andela, they engage in three months of intensive simulations followed by three months of building on our own products, during which they're reinforcing best practices for distributed agile development teams and building real products for real users. The goal is for them to apply their skills exactly as they will when working with our partners. Ultimately, Andela is preparing developers for what we call the "Google test"—could we place them with one of our partners, like Google or Facebook, and have them start contributing from day one?

We also spend a lot of time on business skills and soft skills coaching. Even though our developers are technically proficient, skills such as receiving and incorporating feedback in a short period of time, and being able to do so remotely, are very important for a world-class software developer to possess. Those are the kinds of things we are looking at in the six-month technical leadership period.

Once developers receive the Andela stamp of approval and are deemed ready for client work, we hold an internal recruiting process to find them a good match with one of our company partners. They are then fully integrated into that tech team. This means that they will work a forty-hour week, with five guaranteed hours per day overlapping with that tech team. They are on the team's Slack channels or instant messaging system, and

have a company email address just like any other employee. Developers orient onsite at the company's headquarters, usually for anywhere between two weeks to three months, to learn the culture and working style. Then they'll work remotely from one of our tech campuses in either Lagos or Nairobi.

FLETCHER FORUM: *Given that developers work remotely in Africa, how have Slack and other professional technologies made these partnerships between African developers and Andela's clients possible?*

SASS: Slack, Trello, Blue Jeans, and a handful of other tools are absolutely critical to the distributed team model. Internally, we use Slack, but if our partners choose to use a different platform, then our developers will be on-boarded to whatever that is. We are pushing the needle on what a world-class distributed team looks like and we are helping to inform our partners, particularly ones that have not done distributed work before.

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At the TechCrunch Disrupt Hackathon in San Francisco earlier this year, a team of Andela developers built a fascinating tool called Imprompt.io that makes looping in a remote team member very simple. If two colleagues have an impromptu meeting at the water cooler and come up with a great idea, they can easily call in a remote teammate via Amazon Alexa, the voice that powers a hands-free speaker you control with your voice, or ask Alexa to "listen" and transcribe the meeting notes in the case that their teammate is unavailable.

I will use this example: if our colleague Kim Wilson isn't here with us, we can say, "Hey Alexa, is Kim Wilson online and available?" Imprompt.io will check her calendar, check if she's online on Slack, and if she is, it will start a call with her right away Then it will transcribe the whole conversation—either just between the two of us, or with Kim if she actually picks up the call—and then Slack will send that conversation to all of us. These are the kinds of tools that really enable people to not miss those in-person moments, to be able to track information as it happens in real time, and to thrive as a distributed team.

FLETCHER FORUM: *What is Andela's vision for connecting these African developers to big tech companies and bringing the tech industry to Africa and developers' local communities?*

SASS: Each Andela developer commits to four years with us, and the point of that is for them to be able to go through the intensive six months and then work with multiple cutting-edge tech teams of different sizes— startups all the way up to large enterprise companies. This is so they can see how complex teams at different stages of development work, and can think about that for their own companies, or tech divisions they are leading in Nairobi, Accra, Cape Town, wherever. That is why we feel like they need to see and feel; they need to orient in person once a year. They will actually go to that client or to a new client and be immersed in the best, most agile practices. This is how we hope to leapfrog the need to build an MIT or a Berkeley in one of the cities where we are operating. We would rather our developers be apprenticing and honing the craft of software development alongside the best-in-class teams. We are wildly excited and convinced of their talent, but they still need to do it. Everyone needs to sit beside an expert who is seven years more advanced and actually do it. The fastest possible way is not for them to get another master's degree but to build world-class products. We know that our developers are helping teams build better and faster while they get to be a sponge for all of that knowledge— how do they do stand-ups; how do they do a sprint; what is the timing of all of that? What is the publicity like around it? How are they helping to inform it? All of that messaging, how does the team communicate when there's a big change? When the brand or something else changes, how do they change it across multiple platforms? That's the kind of thing we want them to experience in real time with real teams and then bring that back to Lagos and Nairobi and be able to incorporate it in their own businesses or in their own tech teams.

FLETCHER FORUM: *In September, you spearheaded Andela's participation in a women's education event in Kenya by way of Global Give Back Circle. How has this been a collective movement that spans beyond just the efforts of Andela? How has tapping into this human capital resource in Africa been part of a larger movement to access talent in Africa?*

SASS: When we started Andela, we were utterly convinced of the talent. There are a couple of different ways that we validated it, but I'll tell you one story that was particularly profound. We use a psychometric test that's

designed by a test maker in Toronto, and most of the talent that they're screening is from the U.S. and Canada. When we launched our second cohort in Lagos—this was when we were still getting organized but we made a big push to get a lot of applicants—we got 2,500 applicants for the position. We were shocked by that number. The testing service called us and said, "We have never seen so many applicants on the platform, what in the world is this job that everyone is applying to like wildfire?" And secondly they said, "You already have 48 candidates in this pool that we think are in the top two percent of intellect in the world." That was the point at which a lot of us—the four founders—who were thinking about it as a pilot, pivoted and focused on it as a full-time new company. Just because of the extraordinary untapped potential talent. This was a remarkable indicator of what we all believed to be true. We had the supply side—2,500 people—without much effort, and who wanted this kind of an opportunity. We knew we were onto something huge. This was our promise, and something that we have tried to deliver on every single day: *How do we let the entire world know about the caliber of talent that we are seeing?* We promised them that we would not waste any of their time on something that is not immediately relevant to a client that they're excited to work for, that they are pumped to be part of their team and build their product.

How do we let the entire world know about the caliber of talent that we are seeing?

In the last two months, we have seen a fundamental shift in this landscape that was expedited by the Chan Zuckerberg Initiative and by Andela. In August, Mark Zuckerberg made his first trip to Africa, and within an hour of being on the ground in Nigeria he was standing in our Lagos office. This was game changing. Again, it is not that the talent wasn't there, it is just that they had never been in a global spotlight like that, and it happened relatively quickly. This was something that we knew would happen, that we were all driving towards—all of the founders were never going to sleep until this happened—but in a two-month span, we saw a whole new focus on the attention and energy of the tech sector in Africa. People had a new revelation, thinking, "Wow, there's all these startups in Lagos, there's so much of an entrepreneurial spirit there." And Andela said, yes! How have you not seen that before? But that external validation is important. Now we are doing that through the Chan Zuckerberg Initiative and all of our different partners—and that includes IBM, Microsoft, and dozens of high-growth startups across the U.S.—that are now saying, "these developers

are great, I need two more. I need you to grow with us." We have certainly been able to accelerate the attention and energy on this and cannot wait for it to be a watershed moment, where it is an obvious source of talent, where people ask, "How did we not think about that before? There's such a pool of untapped talent there. That's exactly the kind of fresh energy and ideas and the landscape in which I want to grow my tech team."

FLETCHER FORUM: *In addition to the Chan Zuckerberg Initiative, how have other entities—such as other investors, non-profits, or governments—been partners to the Andela movement?*

SASS: We have a lot of supporters and champions. We are a big part of the tech ecosystem, from ways to get the great curriculum and training that is already out there upstream to young and budding technologists. We have participated in all kinds of open source projects and hackathons—we won the first Uber hackathon on the continent. I'll give you an example of ways that Andela is tapping in to solve local problems. We are located in a part of Lagos called Yaba, where there are many different tech start-ups. One is Hotels.ng, which is a competitor to Hotels.com, but for a Nigerian market. They opened up a hackathon to predict ten percent of cancellations on their platform. They wanted to be more efficient and enable better use for everybody—the hotel, the company, etc. Andela predicted over 40 percent of their cancellations and we were able to roll out the way that they did that on Android and on iOS within a weekend. That's a great example of a growing company that came to us with a problem in that local marketplace and said, "Help us solve this." We blew it out of the water with that 40 percent.

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We're also thinking about how to get more women in technology, how do we get the messaging upstream, how do we convince people to take more time with the foundational curriculum and then reapply? There are lots of different ways that they are tapping into a larger ecosystem.

FLETCHER FORUM: *Which of the partnerships that Andela has been involved with has been most successful? What does Andela define as a successful partnership?*

SASS: We are really heads-down focused on the core business model at this moment, which is long-term placements with developers in each of these tech stacks. The large majority of our partners right now are our clients. We have just under 50 clients, and a great partnership to us looks like a high-growth company that really needs to build an extraordinary tech team and that wants to grow alongside us. That starts out with one or two developers, and eventually one of those becomes a team lead and hires several more, and is thinking about how we grow alongside them for the foreseeable future.

FLETCHER FORUM: *In what, if any, situations has Andela found it more strategic to move forward without a partnership where one was intended or possible?*

SASS: We have remained friendly and supportive of all governments, but we have not formally partnered with any to date. I think that it is important for us to have the freedom to move and remain autonomous. The biggest, most obvious one is our choice to be set up as a for-profit business, and go after top-level clients—we are not going to effectively convince the world of the caliber of this talent otherwise. In order to do that, we raised serious capital from some of the best venture capital firms, some of their first investment in the continent. It's a huge amount of faith and trust in us and the startup team, but it's also the only way to say that this is truly competitive talent. Our choice to do that enables us to move very quickly compared to some of the other sectors and ways that we might have set up the business. We have the freedom to pivot and move with the markets to where we see fit, and we have had very positive reactions from the governments in both locations. We are trying now to see how we can leverage each other without being further tied down.

FLETCHER FORUM: *What have been some of Andela's greatest challenges?*

SASS: A challenge has been to change hearts and minds about Africa as a new source of talent. We did not spend a whole lot of time making the case on "why Africa?" What we did was put a wildly competent and effective person on their team. We had to test that out in different ways. First that was incorporating a thirty-day trial period, where our developers were doing short-term projects to get up to speed. Once clients saw how well the developers were working with the rest of their team and the quality of the products that were being built, we saw a real tipping point, where they

said, "Yes, we definitely want to hire a full-time, longer-term one." But we certainly have had to convince people of a new source of talent at the beginning, and that was a huge challenge. A lot of the attention and energy on tech sectors around the continent is really blowing up alongside of us, and we would like to think we had a big part in dragging them along with us.

FLETCHER FORUM: *What are Andela's opportunities for the future?*

SASS: We are actively scaling into new countries. We are looking at Uganda, Ghana, and South Africa. Those are huge opportunities for us to bring more future Andelans, spread the good word, and be the go-to place for young technologists. Perhaps a bigger opportunity—the ultimate—is what's going to happen when our developers graduate. They are about two and a half years in now to a four-year fellowship, and we will see our first graduates in a year and a half launching their own companies, becoming Chief Technology Officers, helping to advise governments and other large corporations on how to best leverage the new digital economy across the continent—that's the massive opportunity. Once they have four years with world-class development teams, we cannot wait to see them unleashed, and see how they create and build on their own, and how they help us to scale.

FLETCHER FORUM: *Thank you.* *f*