

Conversation #2

Exploring the Ideal Role of Government, NGOs, Angel Investors, and Universities for Technology Entrepreneurs

Erik Hersman of BRCK



Erik Hersman is an entrepreneur and technologist focused on advancing the use of technology in Africa. He is the chief executive officer (CEO) of BRCK, makers of a wireless WiFi device designed and engineered in Kenya for use in emerging markets. In 2010, he founded the iHub, a pioneering innovation hub in Nairobi for the technology community, bringing together entrepreneurs, hackers, designers, and the investment community. He is also a co-founder of Ushahidi (“witness” in Kiswahili), a nonprofit company whose free open-source software is used to collect

and map information for crowdsourcing, social activism, and public accountability; and of afrigadget.com and whiteafrican.com, online communities that explore Africa's creative solutions, entrepreneurship, and development challenges. He is also a general partner in the Savannah Fund and sits on the boards of Akirachix, Angani, the Kijabe Forest Trust, and the Whitaker Peace and Development Initiative. You can find him on Twitter at @WhiteAfrican.

Erik, you are wearing multiple hats in Kenya's ICT sector. What is the story behind that?

What gives me the right to do what I do rather than anybody else is actually what it comes down to. Well, nothing—besides that I am the one who did it, right? Anybody can do the same things I do! It just takes your desire and ability to champion something. I will go back into some of the history. So if you look back to 2005, that is when I started blogging about tech in Africa. Fast-forward three years from that, I had written about a lot of start-ups, I knew a lot of people, and I was part of the blogging ecosystem that was really burgeoning at that time. So it was a network of people who knew each other.

Then, we came across the post-election violence and craziness that were happening after the elections. Ushahidi was formed, and I was one of the founders. I remember that I came to Nairobi in August of 2008 and was sitting down with a bunch of other guys at BarCamp Nairobi. There was a large turnout. A great amount of interest, and there was everybody present. All the guys who are now CEOs of their own start-ups in the ecosystem, but we were still just ordinary tech guys at the time.

So, we were sitting around afterward, and we were saying, "Why is it that the tech guys in the city only meet up once or twice a year at these events? What if we had a place of our own?" And that was the seed that would eventually grow to become the iHub. So why did not somebody else do the iHub? Because it is a lot of work to come up with the money, to come up with the bigger vision of where this thing needs to be. And keep in mind that I was running operations for Ushahidi at that time,

and actually through all of my time running the iHub, I still did. It is the ability to and the desire to champion an idea, even though there are way too many excuses not to do it. So how do you still push that idea forward beyond what your normal day-to-day job is? I think that is the biggest challenge. Look across the continent. Look at the people who are leading the tech hubs, generally. They are champions of the idea that we can build something together that is greater than any one of us and brings us all together in a different way. It is a desire to champion the idea and do the hard, scrappy work to get people together and convince people to show up for meetings and do all those little, oftentimes unnoticed things.

The iHub started, and that was after we talked to many people, asking, “Hey, will you give us some money for this or that and the other thing?” Nobody wanted to give us any money. Google and Nokia at the time, you name it. Nobody wanted to give us money. So finally, as Ushahidi, we sat down and said, “Listen, as Ushahidi, we can be a really good vector for the money that is needed for the iHub.” And so that is what we did. Omidyar Network and Hivos funded Ushahidi and we built the foundations for the iHub with that.

But very early on, even before we had the space, I went out to people that were in the tech community already, that were my peers and people I respected and who were also respected by the general community—people like Becky Wanjiku, Conrad Akunga, Riyaz Bachani, and Josiah Mugambi. I said, “Hey, will you be the iHub advisors alongside me and help make the big decisions in the iHub’s future, for the community?” We cannot make everything a purely democratic, everybody-votes-on-it process, but we can have a group of us who will help make some of the bigger decisions. And so, that was what we did.

When we first launched the iHub in March of 2010, Conrad Akunga told everybody, “Listen, here is the foundation. What gets built on top of this is up to you. Now, it’s over to the rest of the community to help make this community what it is.” And I think that is the kind of magic that makes the iHub, compared to most of the other tech hubs that are

focused on incubation and other things. It is about the idea that we, as a community, need to be connected to each other and we need a space. We need a place, we need a meeting space that will allow us to almost accidentally find each other from time to time, which will draw us in and connect us in ways that would not exist if we did not have it.

After Ushahidi and the iHub came Savannah Fund and BRCK. How do they fit into the picture?

I think this is oftentimes deceptive. There are teams built around each of these ventures. Teams that are actually more involved in operations than I am. What happens is that there are obvious gaps in the market that need to be addressed. And if I put my name behind it, with, for example, Savannah Fund or with some other initiative—Gearbox is a newer one—it is not so much that I do anything day to day on it. I will sit there in board meetings and help with the ideation, the formation, the governance structure, but I do not have to be involved in the operations. It is more about finding the right people who capture the right vision of it.

So what hats do I wear? Now, I no longer wear this hat, but one that is relevant here was forming the Afrilabs Association and being the first chair for the initial years before passing it on. There is the Savannah Fund and being a general partner in it, but Mbwana Alliy actually runs it day to day. There is forming Gearbox, being on the board and helping create, but Kamau Gachigi leads it day to day. There is AkiraChix, which was the women in this community who built the whole thing, and they just asked me to join the board when they became an official organization three years into it.

And there is BRCK, which I spend 90 % of my time on. I focus on BRCK because it is a venture-backed, for-profit company. All the other things take up that other 10 %, where I am just dipping in and helping as needed. The most valuable thing about me in each of these things is that, by being a part of it, I can either use my knowledge, network, or experience to help make decisions better and faster, but more importantly, I can help push things to actually get them done. There are a lot of people who talk about things, and there are very few people who do them.

Erik, there is a lot of controversy about government intervention into private-sector activities. What is your take? What should be the ideal role of government?

So the role of the government is very simple: To reduce friction in the system for the technology industry to grow. What does that break down into? It breaks down into regulation that is actually good for business—speed of setting up business, tax breaks for new companies, things like that. Another example of friction in the system that does not need to exist is legacy laws that are 30 to 40 years old and put a 20 to 30 % duty on components imported into the country. I can import a fully assembled, packaged BRCK duty free. Yet the components to make it have a heavy import duty—which means it does not make sense to import. In other words, I cannot create a new manufacturing industry in Kenya if we do not have the ability to bring in raw materials that are not produced in Kenya. Like this, we never will create industries unless we change these legacy laws. So again, government's job is to reduce friction. And by reducing friction, they increase wealth and they increase jobs.

Then there are other things, such as providing foundational access, of which the subsidization of the undersea cable by the government was a massive example. That is exactly what the government should be doing, massive projects that bring in both the public and private sectors and help things move further. Another one is regulation around spectrum allocation or licencing.

How about foreign aid and NGOs? What should their role be?

In a well-functioning state, most NGOs would not exist. There is only a limited role for them, because the market answers many of the problems, and the government should answer the rest. However, here in Kenya, we have one of the highest count of NGOs per capita in the world. It is an interesting dynamic though, because international NGOs bring in money for some things, which bastardizes the market for other things. It creates a whole realm of craziness that you would not find in other places.

Let me give you an example. NGOs build bridges that after two years become dysfunctional. This cost a few million US dollars to make, and

after two years, is no longer relevant. Other examples are new livestock programs in northern Kenya that only work as long as the NGO workers are there. As soon as they leave, it all falls apart. These are the kinds of things that we have seen for five decades now, and it does not seem to stop.

Now, if a business had this high of a failure rate, they would not keep operating. NGOs, however, seem to have a limitless amount of money that comes from unilateral and bilateral aid and just keeps on coming in. NGOs keep on having to fund something, and it goes a bit like this: “Oh, let’s quickly procure something, because, shoot, we gotta spend this money before the end of the year.” Or, “Hey, let’s go fund innovation!” Not knowing what “innovation” means to them. They know that 80 to 90 % of the money will be absorbed in overhead and HR costs instead of the innovation that the NGOs say they are going to fund. If you want to see innovation happen, then find vehicles where people are already doing interesting stuff and dump money into the companies that are growing great things and trying new models.

Having said all that, I think there actually is a role where international NGOs can help, and that is with government. That is, funding some of the regulatory research. Research so that laws can be made or something like public–private partnerships on large-scale intra-country projects, such as installing terrestrial cables. Helping to subsidize some of that stuff as it gets built out across the country is valuable, and if it can reduce some of the load on the government, then, sure, that can work.

As someone who runs a for-profit company, if someone wants to provide you with grant funding, you look at all that is going on in the market and you are to decide if it fits the company’s focus and mission. I will take the free money if you hand it to me, but it has to be aligned with what I am trying to do. You need to dump money into me because what I am doing is great, not because what you are doing is great and you want me to do it for you. This type of decision is hard for younger executives, because it comes with some experience. If you are a leader of a company, you have to be strong enough to make the right call for your company. And if you are not making the right call and take a grant that does not

make sense for your company, well, that is on you. Do not blame an industry because you made a bad decision.

Angel investors are crucial in funding the ideational phase of a business. What is the current state in Kenya?

For angels investors, those who have significant-enough disposable income to risk on investing, in Kenya it is a lot easier to put money into something like property and real estate. That is because we are seeing year-on-year growth of that. It is just astronomical! So it tends to be a smart decision to put your money into those things. What we are starting to see, however, are people in business who have made enough money that they are willing to diversify their portfolio out of just real estate. Where it has changed over the past two to three years is that we are seeing a few more people willing to dabble in tech investments locally. It is not large money—maybe USD25,000 here, USD100,000 there—but it is enough to get some companies off the ground. This will continue once angel investors start seeing a little bit of success, and this will bring in more of their peers.

Local angel investors can bring to the table more than what outside investors can offer. Outside investors largely bring in money and experience for early-stage company growth, strategy, and management. That is all good. But what they do not bring is connections to other businesses here in Kenya. Connections can immediately increase the share value of the business that the angels have invested in, and so, making the right introductions to CEOs or other companies is powerful. The problem currently is that angel money in Kenya is usually too expensive compared to money from abroad. If you have an investor coming in from the USA, they will give you USD50,000 and take 15 % of your early-stage, pre-revenue company. The Kenyan angel will give you USD50,000 and want 50 % of your company, if not more. We need to find a balance where we decrease the cost of equity-based money from local angel investors and increase the knowledge base and connectivity of the money for outside investors. It should not just be money invested in a company. What actually needs to happen is that you are investing mentally and physically in the start-up in order to help it grow their company.

How do you see the current state of human capital development in Kenya for the next generation of entrepreneurs?

I do not think universities will be the answer; at least, I have not seen them work for technology education. Graduates fresh out of university are, in general, not prepared to work in a technology company. They are not coming out of these institutions with the necessary skills. The people who do are usually the ones that are self-taught. That is quite disappointing. The universities in Kenya are too bureaucratic and not teaching the right stuff in the classes. Not across the board, but generally, students still learn the same computer languages that they were being taught eight years ago, even though current technology has changed.

Why are people still learning these things? And why are they not being challenged to learn new things? And why are university professors not the ones leading the charge on this? I like what the Moringa School is doing, and I like what a couple of the finishing schools for software engineers are doing. I think that is an interesting model and where we will see more hiring happen in the future.

I love bringing on people into my own company. The young people who have been self-taught and have a raw sense of what they should do. A raw skill set which allows building and growing them in my company. I think on-the-job training—whether it is for the Mike Macharias and Seven Seas of the world, or Safaricom, or Google, or IBM, or M-Kopa, or Intel—is actually one of the benefits of Nairobi. We have enough of those medium and large companies, and this is what sets us apart from Kampala and Kigali and Dar es Salaam. When you come out of university or even without university, you can get a job with Conrad Akunga or myself in our smaller companies. You can get a job with Mike Macharia at his company or with John Waibochi over at Virtual City or with any number of the smaller five-to-ten-person-size startups scattered across the city. There are a number of tech companies from small to large that are accessible to you, whereas they are not accessible in some of these other cities. The offtake of that is amazing. It means that there are more and more people who are being polished into seeing technology as a business opportunity. They develop an important and unique skill set. This does

not necessarily happen in other places, simply because others do not have the critical mass of companies to even hire them.

Reflecting upon the past years, can you point out one of the biggest “Aha!” moments that you have had?

I think it is different for each stage when you are part of growing an ecosystem. I have been here for five and half years now. There are different things that happen throughout that time, and there are different things that matter, depending on the stage that we were in. The first “Aha!” moment was that this little idea of having a physical space would be good for the community. The “Aha!” moment was, “Holy crap, we’re oversubscribed by 2,000 people and, yeah, it worked.” The insight was this—that, yes, actual face time with people is important, even for technologists!

I had a conversation with Eric Schmidt of Google on his visit a couple years back. We were sitting downstairs grabbing lunch at Pete’s, and I mentioned the numbers we were seeing and the success rates of those companies being around 10 to 15 % for their first year. He responded that in Silicon Valley, the numbers are much, much higher, but the success rates are even lower—meaning that we should expect to put out many more companies if we want to see a few succeed at a very large level. This was the “Aha!” moment tied to the need to generate more start-ups. It is a numbers game. So how do we help get more things started?

We understand many will fail and that is fine. But the more we get out there, the better. It is like if you want the real, sort of bigger investors to come off the sidelines and jump into the system for more start-ups to scale, then we need at least one of them to exit at maybe USD20 million in order to prove to people that there is something here. That is what the ecosystem is figuring out right now.

For the iHub, the “Aha!” moment came as we realized that we did not have to charge our members if we come up with a service model that allows us to charge for other services, such as consulting. That is why we built the iHub Research arm, the UX Lab, and iHub Consulting. These

new departments allowed the iHub to be 85 % self-sustaining, generating its own revenue and still fulfill its mission of catalyzing the tech community in Nairobi.

I have realized over time that as you are figuring things out, it is important to be open to the idea that you really are experimenting and improvising a lot of the time. And if things do not work, you stop them. And if they do work, double down on them, and hopefully, it turns into another “Aha!” moment.

Thank you, Erik!



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