"Failure is less tolerated in Africa"

Juliana Rotich ensures African connectivity with her innovations

Interview by Madeleine Nufer*

> *Juliana Rotich is considered a pioneer of the Kenyan IT scene. Her innovations have made the country a leader in Africa. Rotich is co-founder of Ushahidi, a non-profit technology company involved in monitoring crises and elections. In 2019 she co-founded BRCK, the largest public WLAN provider in sub-Saharan Africa.*

How has the digital revolution impacted Africa?

It has put Africa in a position to solve countless problems through innovation on a large scale. Over the past twelve years, I have had the privilege of working with great teams to solve some of these problems. Digitalization has reconnected Africa with the rest of the world. Internet adoption in sub-Saharan Africa continues to rise, driven by the spread of mobile internet subscriptions. Currently, 99% of internet subscriptions are taken out on a mobile device. Africa has seen the highest growth rates in in recent years. In 2017 alone, internet use rose by 20%. The cell phone is the platform for everything, from payment to news, communication to entertainment. The cell phone is the platform for life in Africa.

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Technological progress is predominantly led by the youth and provides an opportunity to inspire, educate and empower future entrepreneurs and captains of industry.

These young people are digital natives. Given that Kenya has one of the fastest and best-value internets in Africa, it is no wonder that the country is leading the continent in innovation. This is due to the huge number of young people and their access to the internet. And the wave of young people extends across the entire continent. Companies like Mookh Africa see this revolution as an opportunity for youth. They offer this segment of society a platform to develop and expand their business. When I see what Mookh Africa is doing, it fills me with hope, because they are living proof that Africa is reconnecting with itself and with the rest of the world. It is a testimony to the creativity and dynamism on the continent. This dynamism is essential for the future.

What are the challenges of connecting Africa?

The affordability of data remains a challenge, and there are still areas that are not fully connected to the internet. Connectivity to the rest of the world is largely better, but connectivity between African countries remains an obstacle.

You co-founded BRCK to help solve these problems and to ensure connectivity even in remote locations. How does BRCK do this?

Modems were developed for companies with ubiquitous electricity and existing phone and fiber optic networks. The infrastructure in large parts of Africa and the world is less robust, so Ushahidi set about redesigning the modem for developing countries. With Erik Hersman at the helm, the team at BRCK Inc. continues the work of making the internet accessible to everyone, and providing the tools to take advantage of the digital economy. They do this with one of the largest WiFi networks in East Africa. This model is called Moja Wifi. BRCK has one of the largest mobile Wifi hotspots in East Africa and will expand to South Africa and Goma in the DR Congo. The idea is to reach people where they are, whether at the hairdresser, riding a motorcycle or on the bus when Kenyans brave their legendary traffic jams. The most important thing is that people are mobile everywhere. Mobility is part of life and therefore

also of the economy. We must be ready to serve everyone by making access more affordable and improving it.

Can BRCK help with education - especially of children and young people - to secure the future of the continent's technology?

The Moja WiFi network has literacy materials that are accessible via cached routers and can be used as part of communities, schools and even on buses. The BRCK team began developing the education kit in 2015. It is available to schools and governments interested in having robust technology available for the education of children and youth.

What advice do you give to girls who want to follow in your footsteps?

I would encourage girls who are interested in technology to enjoy their journey. Passion and joy in what you do is important, because the journey is not always smooth. You also should learn how to put together great teams. This is one of the most important things they will do in addition to their technical work. Great teams do incredible things; knowing how to bring people together around a common goal can make their dreams come true.

Another important thing that I learned quite late in my journey is to consciously create a support system. For example, men can be part of the solution, e.g. by involving them in discussions about what it means to create a favorable environment for women and men to thrive in the technology industry. I am encouraged and inspired when I see organizations like Tech Dada in Turkana, which are part of Learning Lions (a non-profit organization dedicated to education in poor areas of Africa), offering support that young women in the technology industry need to flourish. Akirachix in Nairobi is another great organization that ensures that the future of technology has women in its ranks.

You are an entrepreneur. Do African start-ups face different challenges than start-ups in Europe?

I think we have similar challenges, especially in attracting and retaining good talent to drive business growth. In my experience, one of the main differences is how failure is seen. Failure is less tolerated in Africa. This is a cultural difference. It will be a while before we reach a point where we celebrate learning from failure and support entrepreneurs to learn from mistakes.

There is also a funding gap in the start-up and early stages, and another in the middle stages before companies can grow. Foreign direct investment has increased, and venture capital financing is also growing. So great strides are being made in Africa's technological ecosystems, but the gaps remain. European countries are also openings, pooling funds or, in some cases, investing in funds that have the express purpose of driving the digital economy of African countries. Ultimately, there is hope that technology companies in Africa will continue to address the various problems facing society through innovation and on a large scale.