ANDELA FELLOWS Integrating African Youth into the Global Digital Marketplace

A White Paper

Young people represent one quarter of the world's population. Nearly half are unemployed or underemployed. Meanwhile, the unemployment rate among Web developers in the U.S. is a mere 1%.

One job board alone, Elance, boasts a \$2.7 billion global marketplace for programming jobs that's growing 30% per year, yet thousands of potential African youth are shut out from this work. Governments, the education sector, the philanthropic community and private corporations have been stymied in their attempts to connect young people, skills and the global economy in a significant way.

The Andela Institute has created a program that will increase the number of careers in the digital economy in Africa through a series of four-year fellowships. The program provides both skills training and employment for young adults who make it through a rigorous vetting process and learn in team environments. Through their work, the fellows deliver tailored services to clients. The profits derived from the work are then used to expand the number of participants in the program.

The plan capitalizes on the need for talented programmers and coders around the world, optimizes the bidding process to land those contracts and builds a network of young men and women that will meet the demand for high-end web and software development.

Its 10-year plan will create 81,840 direct jobs and pay \$1.3 billion in direct income to the fellows, while creating a further 409,200 indirect jobs and \$2.9 billion of indirect income into the African economy.

It all begins in Nigeria, the country with the largest population on the continent and the most robust ICT sector.

Nigeria's laudable efforts

Nigeria, like most of its fellow African countries, has had difficulty providing its young people with good jobs. The country's youth unemployment rate is at 41%, with many of those who do find employment earning low wages and seeing few prospects for a better-paying future.

Nigeria's economy cannot absorb the supply of potential employees. In 2014, there were 4,000 new digital jobs available to youth, while 500,000 high school and college graduates were expected to enter the workforce.

The Nigerian government has stood out for its effort to try and reverse the youth employment problem, specifically in the field of Information and Communications Technology (ICT). It has invested in digital infrastructure and ensured high literacy rates. It recently launched a specific program, training 1,000 young people to become programmers and coders for the many contracts advertised on international job boards.

Through NaijaCloud, the government has brought much-needed attention to the issue of giving qualified young people better jobs in ICT, however the high-paying work on a variety of operating systems still gets awarded to savvy and well-trained e-lancers in other countries.

With 34 million people between the ages of 15 and 24, more robust training such as Andela will be required if young people are to find work and ICTs are to have an impact on employment and the Nigerian economy in years to come.

Acute labor shortages play out in many developing countries and thousands of jobs are posted on elance, as well as oDesk every week. Can one answer this call for work and lead this large, educated cohort of young people to these jobs? And can these contracts be turned into more than simply cheap outsourcing for the developed world?

The answer to both those questions is a resounding "Yes."

The Andela approach to youth unemployment

The Andela model finds bright and driven candidates for work in the ICT sector, develops and marshals their talents and ensures that they become independent and successful leaders in the field.

Andela's mission is to identify open jobs, provide rapid skills training blended with learning experiences, and move the brightest, most driven young people into career paths as quickly as possible.

The model has fellows practicing their skills while completing paid work on tasks large and small, such as developing a web page or performing the technical specifications of an on-line job site. Teams will acquire a nimbleness about them, changing a skill base if need be. When a development in the industry occurs, such as Apple's new Swift programming language, they can shift the training focus to get fellows up to speed when it is most needed and when few others have mastered it.

Andela has developed a proprietary algorithm for its competitive bidding. The organization has a "mass customized" approach to submitting job proposals, to ensure they have the greatest chance of being accepted at the highest revenue level attainable. Once these are awarded, the organization promotes strict quality standards of performance with guarantees of excellence. It will also be building relationships with Elance and oDesk. Early bidding by Andela on web and software development jobs have already yielded a one-in-five success rate.

Higher wages will ensue by delivering fellows to a sector that rewards talented individuals who provide reliable and valuable work. A conservative estimate will see hourly wages rise from \$15 an hour in Year 1 to \$30 an hour by Year 4, with annual salaries rising from \$20,000 to \$60,000 during that same time period.

The costs of the program, from annual salaries to training to meals, and for residential fellows' housing, will be more than adequately covered by the profits earned from the awarded contracts. The four-year net profit per fellow will be \$114,948.

Choosing the best people

Andela will find the brightest in this field by wading through a large pool of talent and then testing those people alongside their peers. Those who stand out can then be given the opportunity to go further and become fellows.

For every four fellows it supports, Andela begins with a thousand applicants. It finds the brightest by first reaching out to people through ads posted on popular job boards and radio, and through university departments. The thousand are then vetted and 50 are selected for interviews. Boiling things down further, Andela organizers then choose 20 people for a free "boot camp," where participants learn aspects of computer programming and show the organization's personnel why they deserve to be kept on. Ten people will make it to the second week and then, from those 10, the final four will be chosen as Andela fellows.

The fellows are then enrolled in two months of immersion training that ramps them up to a basic proficiency in a high-demand technical skill. The four years then begin with fellowships providing each participant with a salary. Eighty percent of their time will be dedicated to working and the other 20% to training.

Narrowing the education-employment gap

Students will learn and work with other fellows, bridging a gap between education and employment. A recent report by the McKinsey Center for Government, which looked at how to move young people from education to employment, called for more programs where employers and education providers work with students early and intensely. "The education-to-employment journey is treated as a continuum in which employers commit to hire youth before they are enrolled in a program to build their skills," wrote the authors of the report. This is exactly what Andela is doing.

The Andela model also addresses two frequently cited shortcomings of higher education: the practical techniques that make a smooth transition to employment and the skills needed for entry-level jobs.

Meanwhile, the network's growth will provide opportunity to more young people and bring increased revenue to other countries, as Andela branches out to other parts of Africa with an initial 48 fellows for each first year of operation in a country and scaling up to an eventual 1,000 fellows per site. After establishing itself in Nigeria, Andela will expand into Kenya (2015), Ghana and South Africa (2016), and Ethiopia, Mozambique and Tanzania (2017).

Andela is working to understand the context of each country into which it expands. The organization is working with civil society, government and business to assess each country's digital infrastructure, its talent pool and its ability to build a business there. It has been working to making inroads with the governments. In Nigeria, for example, Minister of Communication Technology Omobola Johnson has met with the team and welcomes Andela.

As the network grows larger and the brand gains traction, organizers both hope and expect Andela becomes a primary source for quality Internet and software talent around the world.

Where social good and private business meet

Global work by Africans need not be simply the supplying of cheap labor and the exporting of precious resources. The corporate sector is capable of doing social good while turning a profit.

Digital Divide Data (DDD) is one of many examples of this philosophy. The organization began in Cambodia in 2001 and has since expanded into Laos and Kenya. It employs nearly 800 people and performs a host of digital work, from e-book conversions to newspaper and archive digitization and from handwriting transcription to digital marketing. It hires youth from disadvantaged communities, as well as people with physical disabilities. Nearly all employees graduate with a college degree and most have secured higher-paying jobs in the formal economy post-graduation.

Andela, which was started by 2U co-founder Jeremy Johnson, an education innovator and champion of youth, wants to be a leader in the burgeoning field of Impact Sourcing. Also known as socially responsible outsourcing, Impact Sourcing has seen large organizations like Microsoft and the Rockefeller Foundation take the lead in encouraging members of the corporate sector to do right in this new economy by practicing responsible outsourcing. They have found many excited by the task ahead.

Andela has gathered a team with global expertise in international development, equitable economic growth, and cross-sector collaborations among business, civil society, philanthropy, and governments. Joining Johnson is Ian Carnevale, Iyinoluwa Aboyeji, Christina Sass and Adam Frankel. They will be heading an organization that will be building a successful youth employment model for these changing times.

- Philip Fine