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## THE FUTURE OF NOT WORKING

As automation reduces the need for human labor, some Silicon Valley executives think a universal income will be the answer – and the beta test is happening in Kenya.

## by Annie Lowrey

The village is poor, even by the standards of rural Kenya. To get there, you follow a power line along a series of unmarked roads. Eventually, that power line connects to the school at the center of town, the sole building with electricity. Homesteads fan out into the hilly bramble, connected by rugged paths. There is just one working water tap, requiring many local women to gather water from a pit in jerrycans. There is no plumbing, and some families still practice open defecation, lacking the resources to dig a latrine. There aren't even oxen strong enough to pull a plow, meaning that most farming is still done by hand. The village is poor enough that it is considered rude to eat in public, which is seen as boasting that you have food.

In October, I visited Kennedy Aswan Abagi, the village chief, at his small redearth home, decorated with posters celebrating the death of Osama bin Laden and the lives of African heroes, including JaKogelo, or "the man from Kogelo," as locals refer to former President Barack Obama. Kogelo, where Obama's father was born, is just 20 miles from the village, which lies close to the banks of Lake Victoria. Abagi told me about the day his town's fate changed. It happened during the summer, when field officers from an American nonprofit called GiveDirectly paid a visit, making an unbelievable promise: They wanted to give everyone money, no strings attached. "I asked, 'Why this village?' "Abagi recalled, but he never got a clear answer, or one that made much sense to him. The villagers had seen Western aid groups come through before, sure, but nearly all of them brought stuff, not money. And because many of these organizations were religious, their gifts came with moral impositions; I was told that one declined to help a young mother whose child was born out of wedlock, for example. With little sense of who would get what and how and from whom and

why, rumors blossomed. One villager heard that GiveDirectly would kidnap children. Some thought that the organization was aligned with the Illuminati, or that it would blight the village with giant snakes, or that it performed blood magic. Others heard that the money was coming from Obama himself.

But the confusion faded that unseasonably cool morning in October, when a GiveDirectly team returned to explain themselves during a town meeting. Nearly all of the village's 220 people crowded into a blue-and-white tent placed near the school building, watching nervously as 13 strangers, a few of them white, sat on plastic chairs opposite them. Lydia Tala, a Kenyan GiveDirectly staff member, got up to address the group in Dholuo. She spoke at a deliberate pace, awaiting a hum and a nod from the crowd before she moved on: These visitors are from GiveDirectly. GiveDirectly is a nongovernmental organization that is not affiliated with any political party. GiveDirectly is based in the United States. GiveDirectly works with mobile phones. Each person must have his or her own mobile phone, and they must keep their PIN secret. Nobody must involve themselves in criminal activity or terrorism. This went on for nearly two hours. The children were growing restless.

Finally, Tala passed the microphone to her colleague, Brian Ouma. "People of the village," he said, "are you happy?"

"We are!" they cried in unison.

Then he laid out the particulars. "Every registered person will receive 2,280 shillings" — about \$22 — "each and every month. You hear me?" The audience gasped and burst into wild applause. "Every person we register here will receive the money, I said — 2,280 shillings! Every month. This money, you will get for the next 12 years. How many years?" "Twelve years!"

Just like that, with peals of ululation and children breaking into dance in front of the strangers, the whole village was lifted out of extreme poverty. (I have agreed to withhold its name out of concern for the villagers' safety.) The nonprofit is in the process of registering roughly 40 more villages with a total of 6,000 adult residents, giving those people a guaranteed, 12-year-long, poverty-ending income. An additional 80 villages, with 11,500 residents all together, will receive a two-year basic income. With this initiative, GiveDirectly — with an office in New York and funded in no small part by Silicon Valley — is starting the world's first true test of a universal basic income. The idea is perhaps most in vogue in chilly, left-leaning places, among them Canada, Finland, the

Netherlands and Scotland. But many economists think it might have the most promise in places with poorer populations, like India and sub-Saharan Africa. GiveDirectly wants to show the world that a basic income is a cheap, scalable way to aid the poorest people on the planet. "We have the resources to eliminate extreme poverty this year," Michael Faye, a founder of GiveDirectly, told me. But these resources are often misallocated or wasted. His nonprofit wants to upend incumbent charities, offering major donors a platform to push money to the world's neediest immediately and practically without cost.

What happens in this village has the potential to transform foreign-aid institutions, but its effects might also be felt closer to home. A growing crowd, including many of GiveDirectly's backers in Silicon Valley, are looking at this pilot project not just as a means of charity but also as the groundwork for an argument that a universal basic income might be right for you, me and everyone else around the world too.

The basic or guaranteed income is a curious piece of intellectual flotsam that has washed ashore several times in the past half-millennium, often during periods of great economic upheaval. In "Utopia," published in 1516, Thomas More suggests it as a way to help feudal farmers hurt by the conversion of common land for public use into private land for commercial use. In "Agrarian Justice," published in 1797, Thomas Paine supports it for similar reasons, as compensation for the "loss of his or her natural inheritance, by the introduction of the system of landed property." It reappears in the writings of French radicals, of Bertrand Russell, of the Rev. Dr. Martin Luther King Jr.

Silicon Valley has recently become obsessed with basic income for reasons simultaneously generous and self-interested, as a palliative for the societal turbulence its inventions might unleash. Many technologists believe we are living at the precipice of an artificial-intelligence revolution that could vault humanity into a postwork future. In the past few years, artificially intelligent systems have become proficient at a startling number of tasks, from reading cancer scans to piloting a car to summarizing a sports game to translating prose. Any job that can be broken down into discrete, repeatable tasks — financial analytics, marketing, legal work — could be automated out of existence. In this vision of the future, our economy could turn into a funhouse-mirror version of itself: extreme income and wealth inequality, rising poverty, mass unemployment, a shrinking prime-age labor force. It would be more George Saunders than George Jetson. But what does this all have to do with a small village in Kenya?

A universal basic income has thus far lacked what tech folks might call a proof of concept. There have been a handful of experiments, including ones in Canada, India and Namibia. Finland is sending money to unemployed people, and the Dutch city Utrecht is doing a trial run, too. But no experiment has been truly complete, studying what happens when you give a whole community money for an extended period of time — when nobody has to worry where his or her next meal is coming from or fear the loss of a job or the birth of a child.

And so, the tech industry is getting behind GiveDirectly and other organizations testing the idea out. Chris Hughes, a Facebook founder and briefly the owner of The New Republic, has started a \$10 million, two-year initiative to explore the viability of a basic income. (He has also been a major donor to GiveDirectly.) The research wing of Sam Altman's start-up incubator, Y Combinator, is planning to pass out money to 1,000 families in California and another yet-to-be-determined state. Then there is GiveDirectly itself, which has attracted \$24 million in donations for its basic-income effort, including money from founders of Facebook, Instagram, eBay and a number of other Silicon Valley companies. Many donors I spoke with cited their interest in the project as purely philanthropic. But others saw it as a chance to learn more about a universal basic income, a way to prove that it could work and a chance to show people the human face of a hypothetical policy fix.

In December, Altman, the 31-year-old president of Y Combinator, spoke at an anti-poverty event hosted by Stanford, the White House and the Chan Zuckerberg Initiative, the charitable institution the Facebook billionaire founded with his wife, Priscilla. Altman discussed the potential for basic income to alleviate poverty, but his speech veered back to the dark questions that hang over all this philanthropy: Is Silicon Valley about to put the world out of work? And if so, do technologists owe the world a solution?

"There have been these moments where we have had these major technology revolutions — the Agricultural Revolution, the Industrial Revolution, for example — that have really changed the world in a big way," Altman said. "I think we're in the middle or at least on the cusp of another one."

GiveDirectly may be a charity, but it speaks in the argot of Silicon Valley. It is a platform, connecting donors and recipients, that prides itself on low overhead and superior analytics. It disdains what it sees as the bloated, expensive, stuck-in-their-ways incumbents that dominate the nonprofit space. And it even has a privileged bootstrapping creation story, beginning with its 20-something

founders batting the idea around in Harvard Square academic buildings and scraping together money from friends.

The idea for the nonprofit came to Michael Faye and Paul Niehaus, who is now a professor of economics at the University of California, San Diego, when they were graduate students at Harvard. Both were studying development and doing fieldwork overseas, an experience that underlined an Economics 101 lesson: Cash was more valuable to its recipients than the in-kind gifts commonly distributed by aid groups, like food or bed nets or sports equipment. If you're hungry, you cannot eat a bed net. If your village is suffering from endemic diarrhea, soccer balls won't be worth much to you. "Once you've been there, it's hard to imagine doing anything but cash," Faye told me. "It's so deeply uncomfortable to ask someone if they want cash or something else. They look at you like it's a trick question."

But at the time, distributing cash aid in a country with little to no banking infrastructure outside major cities would have required an extraordinary amount of manpower, not to mention introducing the risk of robbery and graft. But dirtcheap mobile phones with pay-as-you-go minutes began flooding into sub-Saharan African markets in the 2000s. Enterprising Ghanaians, Kenyans and Nigerians started to use their minutes as a kind of currency. In 2007, Vodafone and the British Department for International Development together built a system, called M-Pesa, for Kenyans to transfer actual shillings from cellphone to cellphone. An estimated 96 percent of Kenyan households use the system today. Faye and Niehaus — along with their friends Rohit Wanchoo and Jeremy Shapiro, also graduate students — thought about setting up a website to raise cash in the United States and send it directly to poor Kenyans. But they never found a nonprofit that would distribute that cash abroad. They decided to do it themselves in 2008. "Because it was a start-up, and we started in grad school," Faye said, "we were open to the idea of it being wrong or failing."

The following year, Faye traveled to small Kenyan villages during the summer break, offering cash to whoever seemed poor and would take it. (The money, about \$5,000, came out of the foursome's own pockets.) That, surprisingly, worked well enough to give them the confidence to start a threadbare randomized control trial the year they graduated. It found that the recipients, who received an average of \$500, saw excellent outcomes: Their children were 42 percent less likely to go a whole day without eating. Domestic-violence rates dropped, and mental health improved.

In time, the nonprofit attracted the attention of Silicon Valley and its deep-pocketed young philanthropists. Two Facebook founders gave six-figure donations. Then, in the spring of 2012, Faye went to a friend's brunch in Brooklyn and met someone working for Google.org, the tech giant's giving arm. She liked the sound of GiveDirectly and arranged for Faye and Niehaus to give a presentation at Google's headquarters in Mountain View, Calif. The company ended up contributing \$2.4 million.

At first, GiveDirectly handed out large lump sums, generally \$1,000 spread into three payments over the course of the year. The nonprofit's field officers would locate low-income villages in Kenya, then find the poorest families in each individual village using a simple asset test (whether a family had a thatched roof or not). The field officers would introduce themselves to the town elders, explain their purpose and return to provide mobile phones and training to recipient families. Then GiveDirectly would push a button and send the money out. On a steaming October morning, I went with two GiveDirectly executives, Joanna Macrae and Ian Bassin, to visit one of the villages that had received GiveDirectly's lump-sum payments. We took off at dawn from Kisumu, a bustling industrial city on the banks of Lake Victoria, and followed a two-lane highway to Bondo, a small trading city filled with cattle, bicycles and roadside food stands. From there, we turned inland from the lake and drove into a lush agricultural region.

The residents of this village had received money in 2013, and it was visibly better off than the basic-income pilot village. Its clearings were filled with mango plantings, its cows sturdy. A small lake on the outskirts had been lined with nets for catching fish. "Could you imagine sitting in an office in London or New York trying to figure out what this village needs?" Bassin said as he admired a well-fed cow tied up by the lakeside. "It would just be impossible."

Perhaps, but delivering money by M-Pesa has some downsides, too. We visited an older woman named Anjelina Akoth Ngalo, her joints painful and swollen with advanced malaria. Sitting in her thatched-roof hut, she told us that she had received only one payment, not the three that she was promised. She had given her phone to a woman in a nearby village who transferred the money out of it. Ngalo visited the village elder to try to get her money back, but nothing had come of it. She was now destitute, living on about \$5 a week. She had not eaten since the day before, and she had run out of malaria medication. (Bassin said that less than 1 percent of recipients experience theft, crime or conflict.)

By giving money to some but not all, the organization had unwittingly strained the social fabric of some of these tight-knit tribal communities. One man we visited in a separate village nearby, Nicolus Owuor Otin, had acted as a liaison between the community and the GiveDirectly staff, showing them where different families' houses were, for instance. For that reason, he said, the other villagers thought he was determining who would get what and threatened to burn his house down.

Still, nearly all the recipients described the money as transformative. Fredrick Omondi Auma — a Burning Spear devotee wearing a Rasta-style hat and bell bottoms when we visited — had been impoverished, drinking too much, abandoned by his wife and living in a mud hut when GiveDirectly knocked on his door. He used his money to buy a motorbike to give taxi rides. He also started a small business, selling soap, salt and paraffin in a local town center; he bought two cows, one of which had given birth; and he opened a barbershop in the coastal city Mombasa. His income had gone from 600 shillings a week to 2,500 shillings — roughly \$25, a princely sum for the area. His wife had returned. He had even stopped drinking as much. "I used to go out drinking with 1,000 shillings, and I'd wake up in the bar with 100 shillings," he said. "Now I go out drinking with 1,000 shillings, and I wake up at home with 900." "I didn't imagine I would be living in an iron-sheet house," he said, referring to his roof. "I didn't imagine I'd be wearing nice shoes. I didn't imagine I would have a business, and earnings from it. I didn't imagine I would be a man who owns cattle."

Many popular forms of aid have been shown to work abysmally. PlayPumps — merry-go-round-type contraptions that let children pump water from underground wells as they play — did little to improve access to clean water. Buy-a-cow programs have saddled families with animals inappropriate to their environment. Skills training and microfinance, one 2015 World Bank study found, "have shown little impact on poverty or stability, especially relative to program cost.

All across the villages of western Kenya, it was clear to me just how much aid money was wasted on unnecessary stuff. The villagers had too many jerrycans and water tanks, because a nongovernmental organization kept bringing them. There was a thriving trade in Toms canvas slip-ons: People received them free from NGO workers and then turned around and sold them in the market centers. And none of the aid groups that had visited the villages managed to help the very poorest families.

In the pilot-project village, for example, Faye and I paid a visit to a woman named Caroline Akinyi Odhiambo, who lives in a mud hut on the edge of town with her husband, Jack, a laborer, and her two small children. The most expensive thing she ever bought, she told me, was a chicken for 500 shillings, or about \$5. Her family was persistently hungry. She knew of three nonprofit groups that had helped the village before GiveDirectly. One aided families with school fees, but it chose not to help her children. "I do not want to talk about it," she said.

What is worse, Faye told me, walking away from Odhiambo's hut, was that most nonprofit projects in the region were never subject to anything like an impact assessment, either. There is no way to know how well they are working, or whether that money would be better spent on something else. "The question should always be: Would we be better off just giving this money away as cash?" Faye said. "There usually is not a way to answer that question."

A vast majority of aid — 94 percent — is noncash. Donor resistance is one reason for this; it is not easy to persuade American oligarchs, British inheritors and Japanese industrialists to fork over their money to the extremely poor to use as they see fit. "There's the usual worries about welfare dependency, the whole 'Give a man a fish' thing," said Amanda Glassman, a public health and development expert at the Center for Global Development. "It's so powerful. It's really a basic psychological feature of the landscape. You'll start drinking. You'll start lying around at home because you're getting paid."

Cash also seems harder to market. American taxpayers might be perfectly happy to fund education for young women in poor countries or vaccinations for schoolchildren. But they might balk at the idea of showering money on poor, unstable countries. "The visual of putting a pill in a kid's mouth is so much more attractive to people," Glassman said.

Institutional inertia is another factor. "There are a lot of good people working in the system," Niehaus said. "And there are a lot of organizations pushing to do cash transfers. But the way they are structured and incentivized from the top down — they aren't structured to do it. They have a specific mandate, like health. Cash transfers give choice of what goal to pursue to the recipients." Moreover, cash might force aid workers and nongovernmental organizations to confront the fact that they could be doing better by doing things differently — often by doing less. "It's easy to muster evidence that you should be giving cash instead of fertilizer," said Justin Sandefur of the Center for Global Development. "The harder argument is: You should shut down your U.S.A.I.D. program,

which is bigger than the education budget of Liberia, and give the money to Liberians. That's the radical critique." Faye put it more bluntly, if half-jokingly: If cash transfers flourished, "the whole aid industry would have to fire itself." There is something to that. One estimate, generated by Laurence Chandy and Brina Seidel of the Brookings Institution, recently calculated that the global poverty gap — meaning how much it would take to get everyone above the poverty line — was just \$66 billion. That is roughly what Americans spend on lottery tickets every year, and it is about half of what the world spends on foreign aid.

In the pilot-project village, the residents had just started to work through how transformative the program would be, what they could do with the money and how different their lives could feel in 12 years. Detractors often say that no one would work in a world with a basic income, that the safety net could grow a bit too comfortable. Ultimately, what a universal income would do to workers in the rich world will remain a mystery until someone tries it out.

But here, many villagers were concerned primarily with procuring the sustenance and basic comforts that their penury had denied them. Odhiambo, the woman who had not been offered aid by the school group, planned to buy corrugated iron sheets for her roof; she considered possibly paying off her dowry. Another villager, Pamela Aooko Odero, ran a household that had been suffering from hunger, with all eight of them living on just 500 to 1,000 shillings a week. She took her money as soon as she got it and went to buy food.

Many more made plans that were entrepreneurial. Two widowed sister-wives, Margaret Aloma Abagi and Mary Abonyo Abagi, told me they planned to pool their funds together to start a small bank with some friends. Charles Omari Ager, a houseboy for the sister-wives, had his phone turned off and wrapped in a plastic bag in his pocket when the first text came in. He was driving the widows' goats and cattle from one dried-out, bramble-filled meadow to another when he happened upon an aid worker, who prompted him to pull out his phone, turn it on and wait. The text was there. The money was there. "I'm happy! I'm happy! I'm happy!" he said. He bought himself a goat that day.

When he got his money, Erick Odhiambo Madoho walked to the cow-dotted local highway nearest the village and took a matatu, a shared minibus, overloaded with 20 passengers, down to Lake Victoria. There he found an M-Pesa stand and converted his mobile money into shillings. He used the cash to buy the first of three rounds of filament-thin fishing line that he would need to hand-knot into nets to catch tilapia in the lake.

When the nets were done, he told me, he would rent a boat and hire a day laborer to work with him. He anticipated that his income, after costs, might reach as much as 2,000 shillings on a good day. I asked him why he hadn't saved money for nets beforehand.

He shrugged, smiled and said, "I could not."