Science & Technology

An App that Offers Microfinance on Demand

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Shivani Siroya

It’s often said that poverty is cyclical. In order to make money — by starting a small business, for example — you need to borrow money. But to access credit, people need to meet a strict set of financial prerequisites that determine their credit scores, a fact that puts conventional borrowing out of reach for billions worldwide. And so the cycle continues.

“The financial system is closed off to too many people, especially in developing markets,” says Shivani Siroya ’06PH. “And those are the people that are most in need of small loans.”

Siroya, who is the CEO and founder of the microfinance company Tala, became intimately acquainted with this problem while working for the UN Population Fund in India in 2006. In her role analyzing cost-estimation models for local public-health programs, she spent a lot of time with small-business owners.

“I got to know their daily lives intimately. I met their customers. I saw the hundreds of interactions they had every day,” Siroya says. “And I realized that a credit score wasn’t the only way to assess someone’s risk.”

Using her own money, Siroya started making small loans — $300 to $500 — to small-business owners, looking at different criteria to determine if someone was a good candidate for credit. For example, she knew that one local tilemaker saved 30 percent of her income every month to pay for her son’s schooling, demonstrating that she was goal-oriented and disciplined. She lent to another artisan after watching how she balanced her budget consistently, allowing her to buy materials on the third Thursday of every month.

Siroya returned to New York in 2008 and resumed a career in investment banking, but she says she couldn’t stop thinking about the business owners she had met. She wondered how she could replicate the personal loans she had made on a larger scale. Siroya realized that the observations she had used to underwrite her loans were quantifiable, and that much of the data was right there on her customers’ smartphones. “When you pay a phone bill or an electric bill, there’s a record on your phone. When you buy a bus ticket or pay a school fee, you get a notification. Even the kinds of apps you use are signals about financial behavior,” Siroya says. “My customers might not have had a traditional credit history, but they all used mobile phones.”

Siroya, who studied public health and econometrics at Columbia, had no experience working in tech, but she started taking coding classes and eventually developed an algorithm that uses new data sets to determine people’s creditworthiness. The end result was Tala’s first product: an Android app — now available in five countries — that allows people to apply for small loans regardless of their financial history.

“It works in real time, using thousands of different data sources to determine risk,” Siroya says. “So if you have an Android device and you’re in one of our markets, you can apply for a loan and get an instant decision.”

Tala, which is funded by a diverse group of investors, has made over nine million loans since 2013, with a 92 percent repayment rate. The average loan is around $100 and is generally paid off within a month. Siroya says that her team — now spread across offices in California, Mexico, Tanzania, Kenya, and India, all markets where Tala is active — is constantly trying to tweak the algorithm to ensure that the process is ethical and free of bias. And the company, which has been called one of the world’s most innovative startups by both *Fast Company* and *Business Insider*, is growing quickly. Siroya says that it aims to be in at least two more regions by 2019.

“Combating global poverty may sound like a lofty goal,” Siroya says. “But with every loan, we feel like we’re making a dent.”

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