

Innovation in mobile technology



In the latest PDEL Innovation Workshop, UC San Diego scholars Claire Adida, Jennifer Burney and Ganz Chockalingam design and implement a digital school-fee payment system in Benin

By Rachel Hommel | GPS News

At the UC San Diego School of Global Policy and Strategy's (GPS's) [Policy Design and Evaluation Lab \(PDEL\)](#), research is at the interplay of public policy, technology and economic development.

At a public talk on April 11, three global leaders looked at the challenges of mobile money implementation in Benin, West Africa and the relationships between technology architecture, institutions and human behavior.

In 2015, the mobile money project received a \$100,000 grant from the [Bill and Melinda Gates Foundation Ground Challenges Explorations](#) fund for breaking the mold in solving persistent global health and development challenges. Mobile wallets and other digital financial services offer tremendous promise for integrating underserved populations into the global economy. The team was awarded a two-year grant in 2017 for \$1.3 million to continue the project's work.

“This project explores the deeply interdisciplinary nature of mobile technology, a

sophisticated approach to development engineering, with a creative solution,” said [Craig McIntosh](#), professor and co-director of PDEL.

In the design and preliminary implementation of their digital school-fee payment system Prêt-à-Payer (Ready-to-Pay), they discovered that in Benin, West Africa 10-20 percent, with up to 40 percent, of students drop out due to inability to pay. However, up to 70 percent of citizens have cell phones. Currently, the ability to send individual-to-institution payments doesn't exist.

“We are primarily looking at solution design, identifying technological and institutional gaps that exist in the development landscape,” said GPS professor [Jennifer Burney](#). “We hope to find creative solutions to bridge these gaps and kick-start development along access.”

[Claire Adida](#), a professor in the UC San Diego Department of Political Science, highlighted the power of remittances as a development tool, from providing insurance against income shocks to improving access to public services and stimulating agricultural productivity.

[Ganz Chockalingam](#), a leading telematics expert and research scientist at the Qualcomm Institute at UC San Diego, rounds out this project team. And while the trio identified numerous obstacles to optimal use, their 2015-16 pilot project showed that in just three months, digital payments reached 12 percent, with 40 percent of the transactions coming from payers they never contacted.

“There is a strong demand for this solution. The news of the innovation has spread through word of mouth,” said [Adida](#). “This pilot gave us encouraging results, it is very promising.”



The project is currently in the scale-up phase, hoping to expand to other countries and leverage a larger community of donors, as well as institutionally expand to health clinics, pharmacies, universities and private schools. Researchers are in conversation with [MFS Africa](#), a mobile money payment hub, to develop their school-fee mobile money payment system nation-wide.

“We know that payers and recipients of school fees are geographically separated, many times over 1,000 kilometers away,” said Burney. “We see that in this difficult payment ecosystem, educational attainment rates are low.”

Future plans will also include working with the Ministry of Secondary Education in Benin and with local school administrators nation-wide to assist secondary school institutions in the on-boarding process, which they hope will create new types of accounts for schools and expand provider areas.

“Why digital? Research has shown mobile money cuts about 90 percent of cost,” said Dilly Aberra of the [Gates Foundation](#). “This is critical in serving the poor and that is who we care about. Every parent wants to send their child to school.”

View [photos](#) and watch a [recording](#) of the lecture.