Inclusive Digital Service Design and the role of APIs:
Creating Impact at Scale

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77% of people in Sub-Saharan Africa don’t have access to the internet on a phone.
It is possible to design a scalable digital service for customers that only have a feature phone.
2% of Kenyan households lifted out of extreme poverty

185,000 women move from farming to business

$1.75bn paid in commissions to Agents

Suri, Jack et al - MIT Sloan & Georgetown University
Despite progress in some areas, and some success stories,

Person-to-person transfers make up almost 69% of the total value of transactions.

61% of transactions are airtime top-ups.

Customers are dependent on cash still

We are seeing increases in the no. of transactions per customer, **but not if we compare to the number of transactions customers are doing in cash**

Cash In makes up 80%

Cash Out makes up 73%
Poor people have underserved needs

**scramble**
Poor people sometimes need to scramble to make ends meet and deal with emergencies

**protect**
Poor people need to protect their family and their earnings from shocks

**aspire**
Poor people aspire to a better financial future
How do we achieve higher activity rates?

Without change, low-income customers will likely continue to favor informal solutions to address the majority of their financial challenges.
APIs have started to unlock ecosystem innovation

Other applications of relevance for poorest segments

Broader financial services

Source: CGAP Teams
1) M-KOPA Solar

A simple business model based on affordability and progress …

1. Customers acquire M-KOPA Solar with a $30 down-payment
2. Customers divert daily $0.50 kerosene spend to solar
3. After a year customers own their solar system
4. Customers then use credit history to further upgrade their lives
A farmer buys insurance with his seed

He activates the Insurance at Planting time (Location is Key)

Weather Station Data is Monitored

Payout decisions are made based on weather data

Payout is transferred to the farmer digitally

“The real challenge was selling insurance”
3) Hello Tractor

It’s Like Uber for Tractors, and It Could Change the Game for African Farmers

Instead of taking out a high-interest loan to buy machinery, this start-up is connecting locals to farming implements via text message.

“Farmers need loans to pay for a $3,500 tractor, but commercial banks in Nigeria charge 30% interest and require repayment within a year, which Oliver likens to paying off a home mortgage in three years!”
“With a new partnership with John Deere, the Nigerian startup Hello Tractor is going to have 10,000 tractors available to make farming more efficient.”
So what’s the problem?
Impact takes time, customer empathy and testing
The reality:
this isn’t easy at all

Mobile network coverage is often lacking

Identity is central - and often missing

USSD is basic /expensive and “clunky”

Payments rails are fragmented, sometimes unreliable and really difficult/ expensive to access

Smartphones are nascent - and data is not cheap
Let's talk Field Workers
Lets talk Customers
Partnerships with DFS Providers are a core part of the solutions, but also a huge painpoint

- High & opaque costs
- Long & opaque process
- Lack of clarity on what is available, & commercials

Price quoted by providers for integration and API access ($10,000-100,000) was too high for many smaller companies
Financial inclusion efforts at scale will be hindered, and innovation limited, until we can unlock:

1) Cost to Access (for both parties)
2) What APIs are available
3) Cost to Use
Prediction:

Reaching Africa’s target demographic in the next 5 years will involve APIs but will retain the human touchpoint at key steps.

APIs done well will help put the right information in the hands of that workforce.

I hope there will be a more efficient way to use that workforce, and identity API thinking is central to that.

APIs done well will help to prototype and try things before committing at volume.

But business model innovation will be essential
Lesley-Ann Vaughan

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