

# Mobile Banking Revolution: M-PESA's Impact on Africa and Beyond

Jay K. Rosengard  
Kennedy School of Government  
Harvard University



**The digital revolution is far more significant than the invention of writing or even printing.**



Douglas Engelbart (1925-2013)  
American inventor best known  
for groundbreaking work on  
human-computer interaction

## Five Questions to Ponder



- What is financial inclusion?
- Why should we care about financial inclusion?
- How inclusive is Kenya's financial sector?
- How has mobile banking revolutionized financial services access/utilization in Kenya?
- What are the implications of Kenya's experience for other countries?

# What is financial inclusion?



- In many low-income economies, most households and businesses do not have access to formal financial services
- This “unbanked majority” is therefore deprived of the financial tools essential for generating the economic prosperity of higher income families and larger firms
  - No bank payment services for domestic remittances
  - No bank savings for income smoothing and asset accumulation
  - No bank loans to produce additional income and investment
  - No financial risk management tools like health and crop insurance to decrease vulnerability to external shocks
- Forced to resort to more expensive and less effective semi-formal and non-formal financial services

# Why should we care about financial inclusion?



- Ensure equal opportunity to utilize services essential in managing household and enterprise finances regardless of one's income level or size of business
- Mitigate financial marginalization and thus generate more equitable and sustainable growth
- Key is to promote economic empowerment of the financially excluded through innovations in financial product design, delivery, and regulation

# How inclusive is Kenya's financial sector? (1)



Indicator (% age 15+, 2014)	Kenya	Sub-Saharan Africa	Low-income countries
<b>Account</b>			
All Adults	74.7	34.2	27.5
Women	71.1	29.9	23.9
Poorest 40% of adults	63.4	24.6	19.4
Adults 15-24 years old	66.4	25.9	20.2
Adults in rural areas	73.0	29.2	24.8
<b>Financial Institutions</b>			
Account	55.2	28.9	22.3
Saved at financial institution	30.2	15.9	9.9
Borrowed at a financial institution	14.9	6.3	8.6

# How inclusive is Kenya's financial sector? (2)



Indicator (% age 15+)	Kenya 2011	Kenya 2014	Change
<b>Account</b>			
All Adults	42.3	74.7	76.6%
Women	39.2	71.1	81.4%
Poorest 40% of adults	20.7	63.4	206.3%
Adults 15-24 years old	40.3	66.4	64.8%
Adults in rural areas	n.a.	73.0	-----
<b>Financial Institutions</b>			
Account	42.3	55.2	30.5%
Saved at financial institution	23.3	30.2	29.6%
Borrowed at a financial institution	9.7	14.9	53.6%

# How has mobile banking revolutionized Kenyan financial services access/utilization? (1)



- 225 mobile money services now operating in 89 countries
- In 47 of these 89 markets, both banks and non-banks are allowed to provide mobile money services
- Almost 300m registered mobile money accounts globally, with half of them located in sub-Saharan Africa
- 2.26 m mobile money agents in developing countries, many more than alternative financial access points comprising: ATMs (1.38m); commercial bank branches (524,000); post offices (501,000); and Western Union locations (500,000)
- 12/14: 479.5m remittance/payment transactions for \$7.5 b; airtime top-up 62.3% of volume, 3.3% of value, P2P transfers 25.1% of volume, 72.8% of value

# How has mobile banking revolutionized Kenyan financial services access/utilization? (2)



Indicator (% age 15+, 2014)	Kenya 2011	Sub-Saharan Africa	Low-income countries
Mobile account (all adults)	58.4	11.5	10
Sent remittance via a mobile phone (% senders)	92.0	30.8	42.8
Received remittances via a mobile phone (% recipients)	88.8	27.6	33.8

- Disaggregation of 58.4% of Kenyans with mobile accounts:
  - 52.5% of poorest 40 percent of population
  - 50.6% of those with primary education or less
  - 56.3% of rural adults
- 60% living on <\$2.50/day have mobile phone access
- Use of mobile phones goes well beyond transfer of domestic remittances: 30.4% received payments for agricultural products and 25.5% received wages through a mobile phone

# How has mobile banking revolutionized Kenyan financial services access/utilization? (3)



- M-PESA (“Mobile-Money”) used for domestic transfers, payment to merchants (Lipa Na M-PESA), savings and loans (M-Shwari), management of bank accounts
- Success factors include: political and economic context; demographics; telecommunications structure; lack of affordable, comparable options; enabling regulations; strong internal management and leadership; good product
- M-PESA has 19m users transacting Ksh15b/day (\$150m)
- Safaricom has >25m subscribers (67% of Kenya’s market), including more than 22m M-PESA subscribers served by >90,000 M-PESA agents, with 23% increase in 2014

# How has mobile banking revolutionized Kenyan financial services access/utilization? (4)



- M-PESA facing strong competition from Equity Bank
  - 3<sup>rd</sup> largest bank (net assets), 2<sup>nd</sup> largest (loans/advances and pre-tax profit); 9.7m customers, > half of the bank accounts in Kenya
  - Subsidiaries in Uganda, Tanzania, Rwanda, South Sudan with regional distribution network of 228 branches, 17,523 agent outlets, 24,223 point of sale terminals, 602 ATMs
- Received MVNO license in April 2014
  - Mobile banking platform is Equitel, core product is Airtel Money
  - Available to Equity Bank account holders for mobile phone top-up, utility bill/merchant payments, account access/management
  - Telecom-led (Safaricom/M-PESA) competing directly with bank-led (Equity Bank/Airtel Money) mobile banking
- Challenges: need for increased competition; transformation of conventional MFIs; greater consumer protection

# What are the implications of Kenya's experience for other countries? (1)



- No countries exactly alike – cannot simply transplant Kenya's model for increasing financial inclusion – but where Kenya's success factors might be present, can adapt
- Demand Side: substantial need and latent demand; sustained political and economic stability; and sufficient population density
- Supply Side: market dominance by one telecommunications company; safe, reliable, accessible, convenient, affordable product; and lack of competitively priced comparable alternative services
- Regulatory Environment: enabling regulatory approach through the creative but responsible use of regulatory discretion
- Must accurately identify pertinent similarities and differences, formulate most appropriate path for utilization of mobile banking to promote greater financial inclusion

# What are the implications of Kenya's experience for other countries? (2)



- Example from South Africa
  - Vodacom announced it will discontinue M-PESA in South Africa on 30 June 2016
  - After 6 years, 1m customers but only 76,000 active users (target 10m in 3 years)
  - 90% of South Africans own mobile phone, 1/3 of these smart phones; 75% of adults have bank accounts, mobile banking widely available to bank customers
  - Vodacom largest telecom, but not dominance of Safaricom; forced to partner with bank (chose Nedbank)

**Cautiously. . . . Optimistic**

