



Advancing financial access for the world's poor

# Agent Economics: M-PESA

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# Dimensions of our research

- Analysis based on 19 agents, representing 125 M-PESA outlets typical of agents in locations where low-income Kenyans live, work and shop.
- Looked at M-PESA commissions, plus other lines of revenue (airtime, mobile handsets and accessories, groceries, video and music sales, pharmacy) to get complete profit and loss picture of agents' businesses.
- Agents drawn from 4 locations:
  1. Kibera in Nairobi (Africa's 2nd largest slum, with 1 million residents)
  2. Kisumu town in Western Kenya on Lake Victoria (Kenya's 3<sup>rd</sup> largest city, population 355,000)
  3. Market towns in Western Kenya such as Mbale & Ahero
  4. Rural villages (outside of Kisumu, Mbale, Ahero)
- Data collected from 2 periods: November 2008, January 2009, by CGAP's Mark Pickens, Sarah Rotman, Ignacio Mas and consultant Olga Morawczynski. Ignacio Mas is now Deputy Director of the Financial Services for the Poor program at the Bill & Melinda Gates Foundation.
- Gathered via agent log books, interviews with agents, superagents and Safaricom

# Research locations

- Isulu**  
(Rural village on dirt road with sizeable market center.)
- Mbale**  
(Market town on main road)
- Bondo**  
(Rural village on paved road with sizeable market center.)
- Musoli**  
(Rural village on dirt road. Many residents are subsistence farmers. 15 km from Kakamega.)
- Luanda & Ahero**  
(Town s on paved road)
- Lirhembe**  
(Rural village off dirt road, which used to depend on mining. Now mines have closed and most residents are subsistence farmers.)

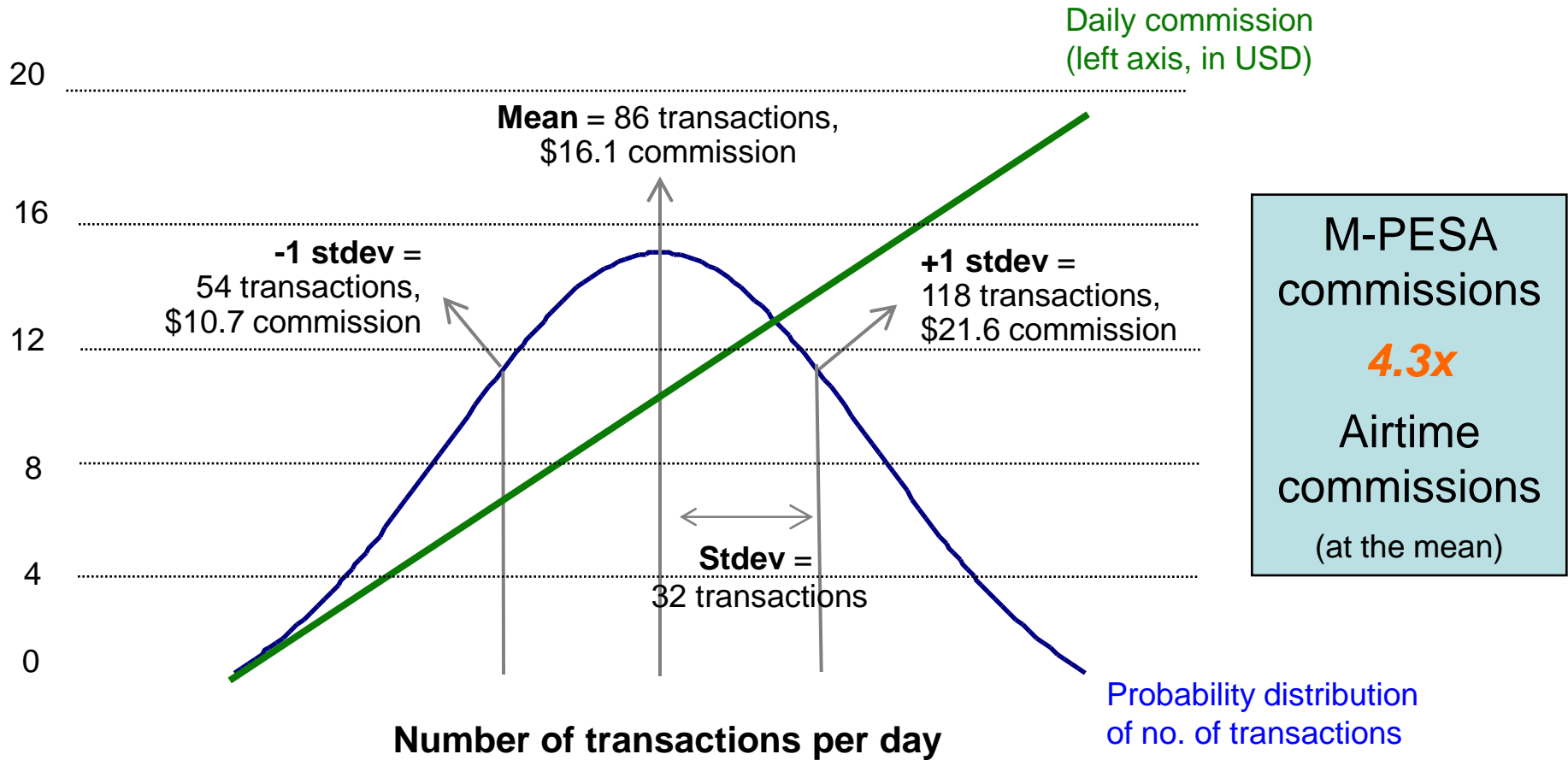


- Bukura**  
(Rural village in farming community with college and two agricultural research institutions. 20+ km from Kakamega, the nearest town. Residents pay 200 Ksh for return trip to town.)

- Kibera**  
(Urban slum in Nairobi, population 1 million+. No formal financial institutions within Kibera.)

- Kisumu**  
(Provincial capital and third largest city in Kenya, population 350,000+.)

# M-Pesa generates 4.3x gross revenue than airtime



**Assumptions:** Agent transaction volumes based on average transactions observed in selected agents. Commissions are after-tax, and assume: (i) equal number of deposits and withdrawals, and (ii) agent pays 30% of commissions to aggregator. Exchange rate used is 79 KSh/USD.

# But revenue is only 1/2 the picture

- Business case incomplete without understanding costs, and drivers
- Factoring in typical expenses, the average agent makes USD 5.01 profit / day, or 3.2x more than selling airtime (see next slide)
- Liquidity management is #1 expense for agents (30% of all expenses). Major components include bank fees, transport to location where cash and e-float can be converted; paying 30% of M-PESA commissions to aggregators who advance funds immediately.
- Taxes substantial (#2 cost). Removed by Safaricom prior to pay out.
- Cost of capital also a major cost for agents, especially in first year (#3 largest expense category)
- Due to the higher costs – particularly liquidity management – ROI on M-PESA (97%) is actually lower than on airtime (373%)

# M-PESA vs. Airtime

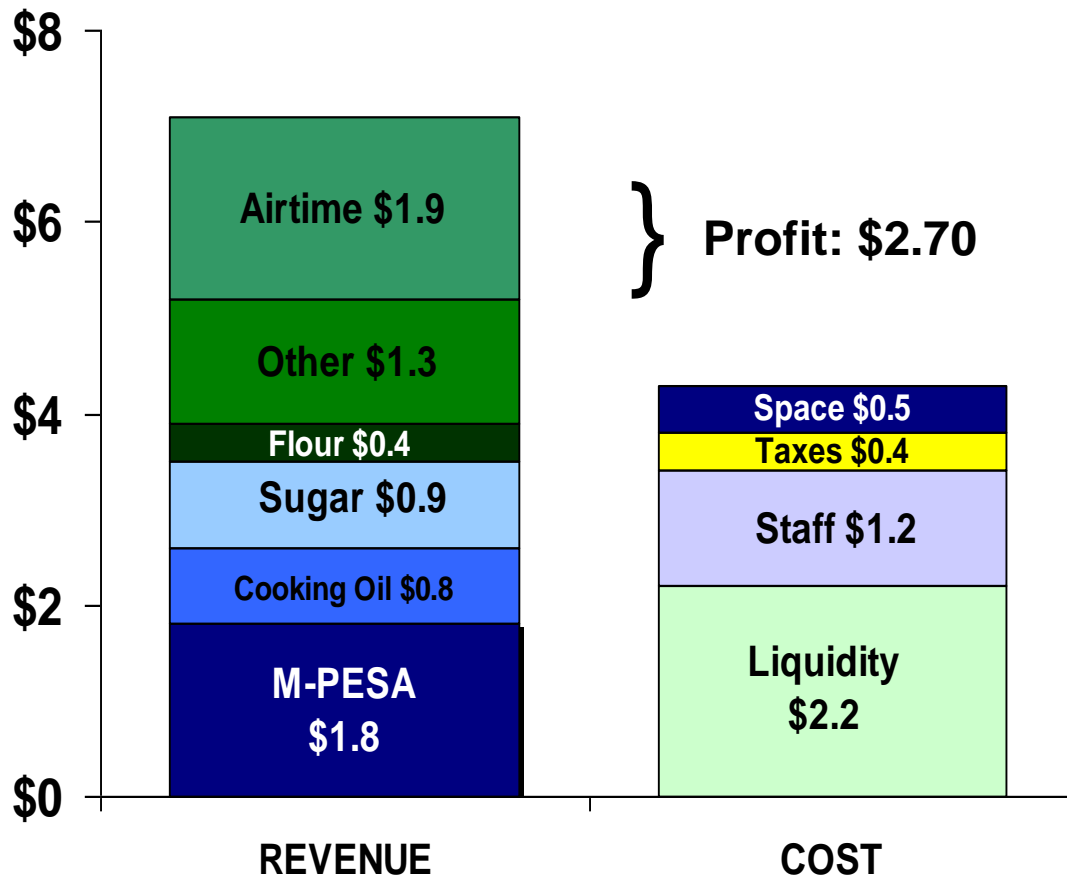
## M-PESA vs Airtime (USD): 19 agents representing 125 M-PESA shops

	<u>Airtime</u>	<u>M-PESA</u>
Capital	129	1,605
<b><u>REVENUE</u></b>		
Gross revenue	3.77	16.11
# trans / day	163	87
Avg ticket size	0.46	16.95
Margin	5.0%	1.1%
<b><u>EXPENSE</u></b>		
Liquidity mgmt	-	3.82
Space (rent + util)	0.73	0.73
Wages	1.21	1.21
Taxes	-	3.38
Cost of capital	0.28	1.95
<b><u>PROFIT</u></b>		
	1.55	5.01
<b><u>ROI</u></b>		
	373%	97%

### M-PESA vs Airtime:

- Amount of K needed to finance an agent business is 12x greater (equal to Kenya's GDP per capita of US 1600)
- Cost to maintain liquidity is #1 expense (30% of total expenses)
- Although margin (1%) is lower than airtime (5%), agents are not fixated on the differential.
- Profit from M-PESA (USD 5.01 / day) is 3.2x greater than selling airtime

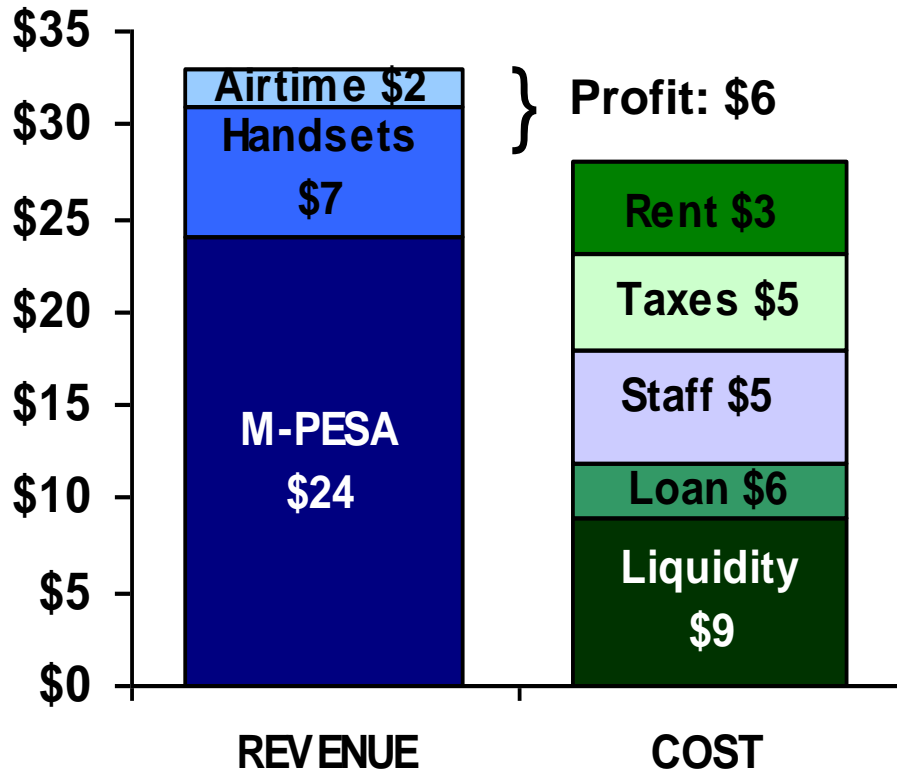
# Worst Case: Japhet - Musoli



## M-PESA unprofitable:

- Revenue from M-PESA = \$1.80
- Cost of M-PESA = \$2.20
- Liquidity management is 50% of his total expenses due to long distance to exchange cash and e-float

# Middle Case: Maurice – 5 stores

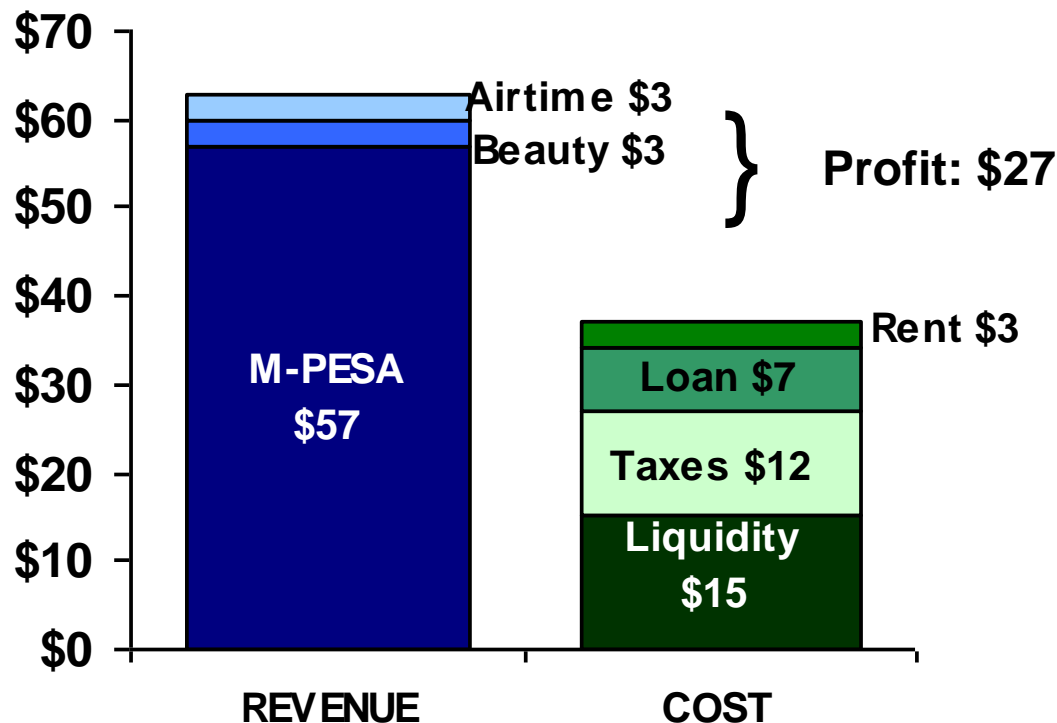


## M-PESA not profitable, yet:

- Limited K increases cost of liquidity: what he has in cash and e-float is only 1/3 total value of M-PESA transactions. So he employs someone to revolve capital 3x/day.
- M-PESA will become profitable after he finishes paying off start-up loan



# Best Case: Jack - Kisumu



## M-PESA is extremely profitable:

- Location is key → large volume of transactions. He does 3x # of trans/day than average agent → 256 trans/day
- Was a lawyer previously, but lost job during election crisis in 2008; makes more money now as M-PESA agent



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