

## Case 2: M-Pesa

### Module 2: Who Gets Access to Financial Services?

#### Background

In 2007, most Kenyans had no bank account. The country's banking infrastructure was concentrated in Nairobi and a handful of other cities. Rural populations – roughly 75% of the country – relied on informal savings groups, bus drivers carrying cash envelopes, or simply going without financial services. Opening a bank account required documentation many people did not have, minimum balances many could not maintain, and physical proximity to a branch that did not exist in their area. These are precisely the barriers covered in M2L1 (Financial Exclusion).

What Kenya did have was mobile phones. By 2007, mobile phone penetration had reached approximately 30% and was growing fast. Safaricom, a subsidiary of the UK-based Vodafone Group, was the country's dominant mobile operator with a nationwide network of airtime resellers – small shops and kiosks that sold prepaid phone credit.

Safaricom's insight was that the infrastructure for distributing small-value digital credits already existed. The question was whether it could be repurposed for money.

#### What Happened

M-Pesa (from “M” for mobile and “pesa,” the Swahili word for money) launched on March 6, 2007. The system worked via SMS on basic feature phones – no smartphone or internet connection required. Users registered at any Safaricom agent location with a national ID card. Once registered, they could deposit cash at an agent kiosk, which converted it into electronic value stored on their phone. That value could then be sent to any other mobile phone user via a text message, withdrawn as cash at any agent, or used to pay for goods and services.

The transaction fees were low – approximately 1-3% depending on the amount – and transparent, displayed on a printed tariff card at every agent location. There were no monthly fees, no minimum balances, and no paperwork beyond the initial registration.

Adoption was extraordinary. Within two years of launch, M-Pesa had approximately 6.5 million registered users. By 2012, it had 15 million. As of 2024, M-Pesa serves over 40 million active users across multiple African countries, and approximately 96% of Kenyan households have at least one M-Pesa account. The service processes transactions equivalent to roughly 50% of Kenya's GDP annually (approximately USD 314 billion in 2023 across all markets). Researchers at MIT estimated that M-Pesa lifted approximately 194,000 Kenyan households (2% of the total) out of extreme poverty between 2008 and 2014, primarily by enabling women to move from subsistence farming into small business.

A critical factor in M-Pesa's success was the regulatory approach taken by the Central Bank of Kenya (CBK). Rather than requiring Safaricom to obtain a full banking licence before launching – which would have imposed capital requirements and compliance costs that could have killed the project – the CBK issued a “letter of no objection” and monitored the service as it grew. Regulation was applied incrementally as the system matured. This “test and learn” approach contrasted sharply with regulators in other countries that blocked similar services by requiring full banking licences from the start.

The agent network proved essential. By 2024, M-Pesa had over 600,000 agent locations across its operating countries. For comparison, Kenya has fewer than 2,000 bank branches. The agents function as human ATMs: they hold float (cash and electronic value) and convert between the two on demand. This created employment for hundreds of thousands of small business owners who earn commissions on each transaction.

#### The Analysis

M-Pesa succeeded by unbundling the bank account into its most basic function – storing and transferring value – and delivering it through infrastructure that already reached the unbanked population. It did not try to replicate a bank. It replaced the specific service that excluded people most: the ability to send money safely from point A to point B.

Several factors made Kenya the right environment. High mobile penetration combined with low banking penetration created unmet demand. Safaricom's dominant market position (approximately 65% market share) gave it the agent network density needed for convenience. The CBK's permissive regulatory stance removed the most common barrier to mobile money in other markets. And the existing cultural practice of sending remittances from urban workers to rural families provided an immediate, obvious use case.

Replication has proven difficult. In markets where banking penetration is already moderate (India, Brazil), the urgency is lower. In markets where regulators require bank-led models (Nigeria until 2018), telco-driven approaches stalled. And in markets without a dominant carrier, no single provider achieves the network density that makes the service convenient enough to replace cash.

The M-Pesa case validates the core argument of M2: access is not primarily a technology problem. It is an infrastructure, regulation, and distribution problem. The technology – SMS-based value transfer – was deliberately simple. The innovation was organizational.

## Discussion Questions

1. Using M2L1 (Financial Exclusion), identify which specific barriers to financial access M-Pesa addressed and which it did not (e.g., credit, insurance, investment products).
2. The Central Bank of Kenya chose a “test and learn” regulatory approach. Evaluate the risks of this strategy compared to the precautionary approach most European regulators take, drawing on M7L3 (Regulating the New).
3. M-Pesa's agent network creates a physical cash-in/cash-out layer on top of a digital system. How does this relate to the payment infrastructure concepts in M6L1 (Payment Rails), and what happens as cash usage declines?
4. If you were a mobile operator launching a similar service in a country where 60% of adults already have bank accounts, what would you do differently from Safaricom's approach?
5. Could a cryptocurrency or stablecoin-based system (M3L4, DeFi and Stablecoins) deliver the same financial inclusion benefits as M-Pesa in a market without reliable mobile networks?

## Further Reading

- Suri, T. and Jack, W. (2016). “The Long-Run Poverty and Gender Impacts of Mobile Money.” *Science*, 354(6317), 1288–1292.
- Mas, I. and Radcliffe, D. (2011). “Mobile Payments Go Viral: M-Pesa in Kenya.” In *Yes Africa Can: Success Stories from a Dynamic Continent*, World Bank.
- Central Bank of Kenya (2021). *Kenya Financial Sector Stability Report*. CBK Annual Publication.