Leveraging Mobile Phones to Enable Basic Banking, Payments, and Economic Growth

Context
In the developed world, one barrier hindering the switch to mobile cash is the costly banking infrastructure—cash machines and bank branches. But in Kenya, bank branches and ATMs are few. Before 2007, Kenyans had difficulty transferring money, as there was no well-established, non-cash method for financial transactions. However, 83 percent of the population 15 years and older had mobile phones with embedded SIM cards, a technology that can facilitate many things, including payment transactions.

Development Challenge
Lack of a well-established, trusted, robust method other than cash for carrying out financial transactions was limiting economic activity and job creation in Kenya. For the many Kenyans who work long distances from their places of birth, the lack of an easy, cost-effective way to send money hampered work mobility and the ability for workers to send remittances back home. The lack of easy access to basic banking account services hampered accumulation of savings for investment and payments.

The Intervention
M-PESA, a mobile-payment scheme run by Vodafone, and Safaricom, Kenya's largest operator (40 percent owned by Vodafone), created an alternative to banks. M-PESA is a SMS-based system that enables users to deposit, send, and withdraw funds using mobile phones. Customers use a country network of 40,000 agents—Safaricom shops, petrol stations, or any shop used to handling cash—to verify a customer's identity via their telephone number before facilitating a transaction, both payments and deposits that accumulate, thus effectively providing basic bank account services. Customers do not need a bank account; M-PESA keeps track of all the money, and holds it in a single account at a commercial bank. Registration and deposits are free and tiered pricing allows even low-income users. Transaction values typically range from US$5 to US$30.

Delivery Challenges
This delivery note analyzes the following key challenges the project faced during implementation and examines how they were overcome:

1. Stakeholder roles and responsibilities. The innovative nature of the project needed to wed very different kind of sectors, the innovative telecom sector with the more traditional and conservative finance sector. The project also required a great deal of coordination between public and private sector actors.
2. **Business environment: technology and market.** Technical complexity and groundbreaking use of SMS technology for money transactions. The level of customer market acceptance and use was of course questionable. Using mobile phone technology in such an innovative manner was a novel concept; the business and development partners needed a strategy to learn about customer needs and uptake.

3. **Banking regulations:** While not a banking service, M-PESA drew attention of regulators. M-PESA created its own financial system, including clearing and settlement, and regulators were concerned money launderers could use it.

### Addressing Delivery Challenges

The following steps were undertaken to mitigate delivery challenges related to **stakeholder responsibilities**.

- The partners implemented an outreach and coordination strategy to bring together the range of different private and public stakeholders: Vodafone, Kenyan Operator Safaricom, software developer Sagentia, the Central Bank of Kenya, the Commercial Bank of Africa in Nairobi, financial regulators, and the UK's Department for International Development (DFID). The M-PESA team also worked with a strategic consultancy group specializing in secure electronic transactions and lawyers in Kenya and the UK to ensure that M-PESA would meet the requirements of the financial sector.

The following steps were undertaken to mitigate the **business environment**-related delivery challenges.

- **Technology:** The project developers brought the British company Sagentia into the project to develop the SIM-based software.

- **Market:** The project developers piloted the M-PESA in Faulu, Kenya to test the technology and how customers would use it. They learned that customers need a fair amount of training. While the pilot focused originally on providing a service to allow customers to repay small business loans, customers began using M-PESA in many other ways, including payments between businesses, purchasing airtime for relatives in rural areas, and depositing cash for withdrawal at other destinations. Many Kenyans work long distances from home and send remittances, so key marketing strategies included the slogan “Send Money Home,” and highlighted the ability to deposit or withdraw cash, transfer money to another person, and buy airtime.

The following steps were undertaken to mitigate the **banking regulations**-related delivery challenges.

- Having been unsuccessful in recruiting a banking partner, the business partners met regularly with regulators, and eventually convinced the head of the national payments system at the Central Bank of Kenya to allow M-PESA to operate under a special license. The regulators stipulated that M-PESA could not pay interest or invest money, and all customer funds had to be deposited into a regulated financial institution with interest placed in a not-for-profit trust. Also, limits on transaction size helped quell the regulators’ money-laundering concerns. In 2010, based on the M-PESA experience, Kenya passed a new law governing partnerships between mobile companies and banks.

### Bibliography

