



Before 2009 less than 10% of adults in Tanzania had access to bank accounts and less than 1% used mobile money services. Exclusion from financial services can keep people in poverty and undermines economic growth, so to increase financial inclusion the central Bank of Tanzania developed the country's mobile money market. The Bank adopted a 'test and learn' approach whereby mobile money providers introduced new services to the market while the Bank observed their impact. The Bank also introduced new regulation to encourage competition and interoperability amongst providers to make services accessible and affordable to the poor.

The problem

In 2008 financial inclusion in Tanzania was low, and most of the economy was cash-based. Less than 10% of adults had or used bank services, and less than 1% had or used mobile money services. Low levels of financial inclusion was undermining growth and keeping people in poverty. Limited access to financial products and services - like transaction accounts, payments, insurance, savings and credit - was making it difficult for Tanzanians to manage finances, deal with shocks, pay for education and health services or expand their businesses.

Solution

With mobile money technologies helping financial inclusion in other countries like Kenya, the Bank of Tanzania (BoT) began to develop its own accessible and affordable mobile money market. Mobile money services allow customers to make transactions using airtime credit held on their mobile phone account. Mobile network operators (MNOs) provide the service in addition to their call, text and internet service.

The major risks with mobile money were around protecting consumers from both financial risks and data privacy risks. There were also additional challenges of maintaining data standards to facilitate interoperability and data flows amongst services and mobile devices. Regulators also had to consider approaches to curbing anti-competitive behaviour amongst incumbent MNOs and removing barriers to entry for new mobile money providers, so as to increase consumer choice and decrease service prices.

To manage these risks the BoT took a 'test and learn' approach over a number of years before issuing full regulation of the mobile money market. During this period MNOs launched new

services while the BOT observed, tested and issued guidelines in response to emerging risk. Guidelines and standards gave legal certainty to MNOs and protection to consumers, while at the same time gave providers the freedom to innovate. A high-level dialogue between the BOT and MNOs on new service impact, oversight mechanisms and proposed regulatory provisions was maintained throughout.¹

The government began in 2006 by amending the 'Bank of Tanzania Act' to give the BoT power to oversee and regulate non-bank entities providing payment services. In 2007, in collaboration with the Tanzanian Communication Regulatory Authority, the BoT issued Guidelines for 'Electronic Payment Schemes' which paved the way for financial and non-financial institutions to provide electronic payment services.

The guidelines declare that non-financial institutions such as MNOs wanting to provide electronic payment services must do so with the support of a partner bank or a financial institution.² If an MNO meets BoT guidelines on customer protection, transaction audit trails and industry authentication procedures, the partner bank and the MNO would receive a 'letter of no objection' allowing the MNO to operate as a mobile money provider. This gives the BoT assurance that consumer funds held by MNOs are protected by the formal banking system. So in 2008 Vodacom (M-Pesa) and Zantel (Z-Pesa, renamed EZY Pesa in 2012) launched the first mobile money services in Tanzania. Airtel (Airtel Money) and Tigo (Tigo Pesa) followed in 2009 and 2010.

After this early period the BoT then began to grow the market and make services more accessible and affordable through competition. As the first mover, Vodacom had developed the largest network of mobile money agents, which are individuals providing cash-in and cash-out services for customers on a commission basis. Keen to avoid the market dominance seen by Safaricom in Kenya, the BOT sought to open up the market introducing a 'non-exclusivity mandate' to allow agents to work for more than one MNO. This led to a huge increase in the number of agents across the country, which in turn improved accessibility for customers, as well as boosted profits for agents. By 2018 there were 398,094 mobile money agents, around 8 per 1,000 Tanzanians.³

The BoT also focused on increasing interoperability between mobile money services to further improve service accessibility and increase usage. The BoT issued the '*National Payment Systems Act*' in 2015 which mandated that all mobile money services be interoperable, allowing customers to send and receive money to other mobile money service providers at no extra cost. In 2014 Tigo and Airtel launched the first interoperable services. By 2016 Tanzania became the first country in the world to achieve full interoperability between all of its mobile money services—Airtel, Tigo, Vodacom and Zantel.

By 2018 there were six mobile money services operating in Tanzania: M-Pesa by Vodacom (43% market share), Tigo Pesa by Tigo (36%), Airtel Money by Airtel (17%), Halotel Money by Halotel (3%), Ezy Pesa by Zantel (1%, only in Zanzibar) and TTCL (0.04%). Interoperability led to year-on-year increases in both volume and value of mobile money transactions. In the first half of the 2018/19 financial year, transactions between different providers accounted for a 23.1% increase

in total volume and a 14.7% increase in transaction value compared to the previous financial year.

The observations and lessons from the government's 'test and learn' approach were later enshrined in the 'National Payment Systems Act'. A draft bill was released for consultation in 2012, and then later passed into law in 2015. The Act sets out the formal regulatory framework for mobile money services. To obtain a mobile money operating license, the Act requires non-financial institutions such as MNOs to be wholly owned subsidiary companies with trust accounts with commercial banks holding float funds with a 100% liquidity to protect customers. Furthermore, strict Know-Your-Customer requirements were introduced requiring providers and agents to verify customers with legitimate identification papers. MNOs were also required to pay a 10% excise tax on mobile money fees charged to consumers.⁴ The tax may have been introduced to support increased budgetary spending on government infrastructure and industrial projects.⁵

Impact

The BoT's approach to competition and interoperability is having a positive impact on financial inclusion. The percentage of adults with access to formal financial services, which includes mobile money, increased from 16% in 2009 to 65% in 2017. The percentage of people living within 5km of a financial service provider, which includes mobile money agents, increased from 45% to 86%.⁶ The number of mobile money accounts also rose from 17.5 million in June 2017 to 23.3 million in February 2019. In the first half of the 2018/19 financial year, 83.4 million transactions worth TZS 2,897.76 billion were processed, which represented a 85.7% increase in volume and 52.1% increase in value compared to the previous financial year.⁷

But despite this progress, in 2017 the level of financial exclusion—those without access to formal or informal financial services—remained high at 28%.⁸ The majority of those excluded are smallholder farmers, youth and women living in rural areas. More needs to be done to improve financial literacy and access in rural areas, as well as tackle patriarchal gender norms that prevent some women from using financial products and services. And if passed onto consumers, the 10% excise tax on transfer fees would hit the poor and risk excluding them from the benefits financial inclusion.

Risks and lessons

Professor Ndulu, the Governor of BoT from 2008 to 2018, identifies lessons for other countries looking to grow and regulate their mobile money markets. Regulators need to be aware that innovation involves risks, but overall, innovation should be embraced, as long as mitigations are in place to protect users and consumers from risk. There should also be space for dialogue and negotiation between regulators, MNOs, banks and consumers to make sure policies are responsive to emerging opportunities and risks: "while regulation has to be clear and predictable, flexibility is also important."

Ndulu also emphasises the challenge of dealing with MNO pioneers and traditional banks. Banks initially pushed back against mobile money, arguing that non-regulation of MNOs created unfair competition. Banks had to be convinced they too would benefit from mobile money as more money would circulate the economy: "the banks, needed to be shown that there is a win-win situation for them both. The onset of agent-banking was a crucial turning point when banks saw that mobile money services could be complementary to their business." And finally, Ndulu points out the broader social-economic impacts of mobile money: "Financial inclusion via mobile money makes it easier for users to spend money in other sectors like retail and government services, thereby stimulating broader economic growth and social inclusion".

This case study benefited from the input of Prof Benno Ndulu

Prof Ndulu was the former Governor of the Bank of Tanzania, a position he held between 2008 and 2018. He currently serves as the Academic Director to the Pathways for Prosperity Commission on Technology and Inclusive Development

Endnotes:

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