



Case Study:

Innovation in Financing Green Products for the Unbanked: The Case of CBA Bank and M-KOPA

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Abstract

In December 2013, Commercial Bank of Africa Ltd (CBA) Bank approved a debt facility for M-KOPA, a Kenyan-based tech start-up company in the business of selling solar powered battery packs through a staggered instalment payment system managed entirely via the mobile payments platform M-Pesa. There were many reasons that CBA might have rejected their loan request. M-KOPA was pursuing an entirely unprecedented business model, with no industry peers to benchmark performance against. The company also had less than three years track record in the business, no tangible assets to serve as collateral, no commercial investors lending credibility to its business model, and it was led by expatriates with no prior business history in Kenya. Despite this high-risk profile, CBA helped structure and agreed to manage and significantly contribute to a \$10mn debt facility designed to ease the working capital constraints that were inhibiting M-KOPA's growth.

This case study examines the reasons why CBA approved the transaction despite the company not meeting conventional criteria for lending and being an unknown player operating in an unproven industry space. It aims to highlight how new business, customers and market share can be secured, lasting business relations be sustained and more inclusive financing be realized, all without losing sight of appropriate levels of risk assessment and management. It will also discuss the opportunities for sustainable finance transactions to enhance banks' corporate CSR profile and contribute to sustainable national and economic growth.



Background

CBA is one of the largest privately owned banks in Kenya, with approximately KSh94bn on its loan book by the third quarter of 2014. It was founded in Tanzania in 1962, and moved its corporate headquarters to Nairobi in 1967.

Drivers for innovation in CBA reportedly come from two directions – shareholders from above and customer needs from below. The CBA Board gives its staff a clear mandate to seek new business opportunities and market share, deliver profit, be competitive, and be ahead of the product evolution curve.

At the same time, its goal of integrating sustainability within both business strategy and lending decisions creates a positive enabling environment for sustainable finance transactions. As a senior CBA manager explained: “if we don't innovate a significant proportion of viable ventures will not get financing, and Kenya as an economy will fall behind and stagnate.”¹.

While CBA's internal sustainability policy is still being developed, staff nevertheless say that the Board and senior management's support for innovation gives them opportunities to test conventional boundaries when crafting financial products or exploring new customer or industry segments.

As evidence of this commitment, CBA partnered with Safaricom in rolling out the M-Shwari online savings deposit scheme linked to the M-Pesa mobile payment platform. Since its inception in 2012, M-Shwari has grown to 9.5m customers, of whom 2.3m are active on loans and 5.2m on deposits. The platform has taken KSh134bn in deposits and disbursed KSh14bn in loans since it was launched.

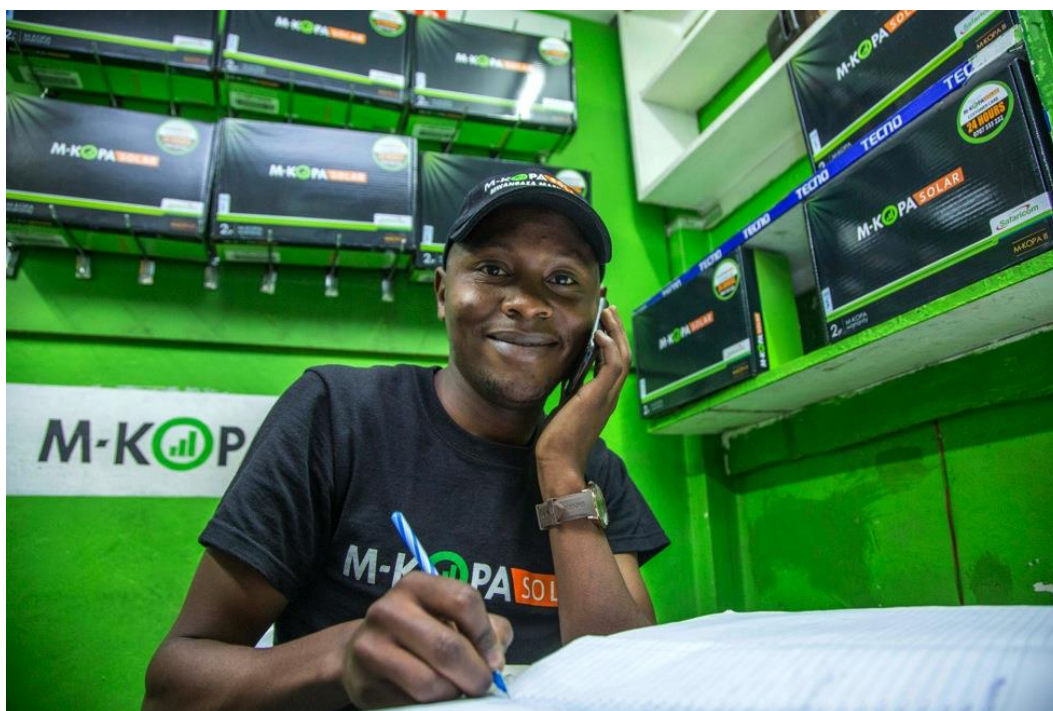
CBA's loan accounts grew by 100% in 2013, and with 20% of Kenyans having signed up to the platform it has become the market leader. It has also demonstrated a commercial appetite amongst the unbanked for credit and saving products.

CBA is not blind to the risks that innovation might generate. It is aware that backing untested businesses could prove costly, and that the effect on their brand of investing in unconventional areas might make existing clients nervous and lose them market share. That said, CBA is keen to find ways to build its market presence without necessarily increasing its overheads, and piggy-backing on the success of M-Pesa to access millions of new customers without investing in infrastructure makes complete business sense.

So, when M-KOPA, a Kenyan-based start-up company selling solar products to the unbanked, approached CBA for a substantial debt facility, even though it lacked the collateral and customer tenure traditionally required, the request was not dismissed out of hand.

¹ CBA is happy to be a leader in this space and capture the majority of new business and non-traditional customers. However, it recognizes that it is bad for Kenya if more banks don't innovate in the same fashion, which is why it has shared this experience .





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Hiram Waruinge at the M-KOPA Solar Service Centre in Nakuru, Kenya says, “the M-KOPA III is very good-looking...people are definitely attracted to it.”

M-KOPA: Solar Products for the Unbanked

M-KOPA was founded in 2011. It sells solar powered battery packs to low-income, often unbanked, customers on a pay-to-own instalment basis. It was launched by Nick Hughes, formerly the Head of Global Payments at Vodafone; the GSMA² Foundation's former Director, Jesse Moore; and Chad Larson, who brought a long background in finance to the team, most recently with Africap Microfinance Investment Ltd, a fund that offers equity capital and expertise to African micro-financing institutions.

Their passionate belief in the ability of mobile money to unlock the spending power and credit potential of unbanked customers led them to seek opportunities to capitalize on Kenya's widespread use of mobile money payments, and to test the potential for mobile payment platforms to overcome the price hurdle that was discouraging potential customers.

Before mobile money, credit services for the unbanked were a physical undertaking that usually fell to microfinance institutions (MFIs), who charged onerous interest rates to compensate for the significant costs of monitoring loans. M-KOPA's business model aimed to bypass the costs and credit risk barriers involved in physical payment collection systems. Once established, it could roll out a variety of different products for lower income consumers which were readily affordable if staggered over a manageable payment period.

² Groupe Speciale Mobile Association, which represents the interests of mobile operators worldwide.



Given the importance of electricity to charging mobile phones, providing domestic light and powering radios and televisions, M-KOPA opted for solar power as the product with the greatest potential to build –and prove – their distribution system. It calculated that potential customers would save KSh10 per day from not buying kerosene while they are paying off the device, and KSh50 per day thereafter. Switching to solar from kerosene could result in savings of \$6-800 per household over a 4-5 year life cycle.

In a country where only 18% of the country's 44m people have access to grid energy, M-KOPA saw considerable growth potential, and estimated that it could reach around 4m of Kenya's 7m households in Kenya. The solar battery pack alone could be sold to up to 2m households; experimenting with different price points up could make the reach wider still.

M-KOPA launched operations in 2012 with a scheme which allowed customers to purchase solar battery over 18 months. The packs included an embedded SIM device that could track customer use remotely, and disable power in the event of non-payment.



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One of M-KOPA Solar's 100,000 customers, Leah Tallam in Eldama Ravine says, "I used to spend 11 cents (KSh10) each day to charge my phone at the market. I now do it in the comfort of my home."



Impact Investment Financing: Opportunities and Limitations

Given its social mission, with a focus on improving the livelihoods of poorer consumers, M-KOPA's business model was first financed by grant and impact investment capital. Impact capital represents a growing asset class, and can be described as philanthropic, subsidized or high risk private equity which seeks investment opportunities yielding triple bottom returns: less aggressive – or even sub-commercial – financial returns with profit margins sacrificed in return for demonstrable social and environmental benefits. With the backing of such capital, M-KOPA enjoyed early success and growth, and international acclaim, for its social enterprise model – including two IFC/FT awards for sustainable finance in 2013.

Despite its early success and growing international attention, M-KOPA faced capital constraints by mid-2013. Its \$2.5m working capital was proving insufficient to meet customer demands and company aspirations for growth, and this combined with an unwillingness of philanthropic investors to invest further funds led the company to seek local finance.

The collateral being offered was of a highly unusual nature, namely the mobile money loan book of M-KOPA's 30,000 customers. CFO Chad Larson and his team realized that a loan book of this nature had rarely – if ever - been securitised before, and several banks responded negatively. CBA, of which it was an existing client, came to represent M-KOPA's best and perhaps only hope of finding a local commercial debt provider.

CBA was well aware of M-KOPA's financial position, given that all company transactions took place on the M-Pesa platform which directly interfaced with M-KOPA's CBA account. M-KOPA's customers paid exclusively through mobile payments, and the company had chosen to bank with CBA precisely because of its ability to provide a ready interface between Safaricom's M-Pesa platform and M-KOPA's banking account. M-KOPA's impact investor partners had demanded unfettered access to M-KOPA's transactions, which they achieved through a system set up by CBA that interfaced between M-KOPA's M-Pesa payments and bank account transactions that gave CBA, as well as M-KOPA's investors, real time online access to the company's transactions and cash position.

Thus, the banking data that CBA had access to provided such depth of empirical data on M-KOPA's historical performance that the proposal was considerably de-risked in CBA's due diligence. The data also supported the innovative proposal that M-KOPA's current and future cash flows might function as alternative collateral to guarantee the loan.





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One of M-KOPA Solar's 100,000 customers, Evelyn Chelimo, in Eldama Ravine, Kenya says, "I can now sew my children's clothes at night. My children can also read, without worrying about spending too much on kerosene."



CBA and M-KOPA: An Innovative Partnership to Finance Sustainable Products for Low Income Consumers

CBA's detailed understanding of M-KOPA's cashflow position and historicals helped it recognize that demanding repayments from the outset would cripple the business. It therefore granted M-KOPA a bullet payment structure – a 48-month holiday on principal payments and then bulk payment of the entire capital borrowed. Additional conditions included continued access to the company's automated system and a commercial yet favourable interest rate of 16% that M-KOPA was readily willing to accept³.

Taking into account the interest rate, the robust margins that M-KOPA was enjoying on its product sales, the company's payment history, and its unique transaction structure, CBA's modelling predicted results on a par with conventional commercial debt facilities. To provide a further layer of guarantee, it limited its overall exposure to 20% of the \$10m M-KOPA was seeking to raise, the balance to be provided by external impact investors. The decision for CBA to lend to M-KOPA was therefore innovative, but the risk was sensibly limited.

Outcomes

With CBA expressing readiness to participate, the reservations of the nine other investors were assuaged. Despite its minority stake in the financing agreement, CBA was able to spearhead the transaction and ensure that its interests were met. On any points that the investors and Bank disagreed about – such as the jurisdiction and legal system under which disputes needed to be resolved – CBA's position prevailed. None of the other investors wanted to lose such an influential and credible. With everyone aligned behind the need to finance M-KOPA and keep CBA on board, the transaction was surprisingly swift. Following initial conversations in late July the entire process was completed by December 2013 without any objections from the CBA Board of Directors or advances committee.

The first year of operations has been smooth sailing. M-KOPA's customer base has grown from 30,000 to 150,000, with 500 more joining every day. It is the market leader in pay-as-you-go services for off-grid customers, and is looking to add new complimentary products, using its mobile payment history for each individual customer as a credit rating system by which to approve additional product payment loans. The transaction is promising commercial returns to CBA, as well giving it an enhanced profile as a financier of sustainable products for low income customers of green-friendly products. The innovative financing partnership has proved to be a win-win all around.

1. By comparison, unsecured cashflow lending to SMEs is typically priced at 20%.





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Raphael Maleto at the Safaricom Centre in Nakuru says, “With the M-KOPA III, we are doubling weekly sales. I have sold 23 pieces so far and it is great to work with a product that is helpful and moves fast.”

Lessons Learned

From CBA’s perspective, the key lessons were:

- Being flexible in crafting new and unusual transactions should not immediately be seen as a risky, irresponsible move by banks. A flexible outlook can also mean more business opportunity.
- Banks need to move away from the assumption that one size fits all. They need to examine merits and opportunities on a case-by-case basis.
- Innovative transactions, and investments in products focused towards lower income customers in untested markets, can still be designed without sacrificing the bank’s fundamental objective of securing commercial level returns.
- Innovative transactions may require more homework and heavy lifting at the initial design stage. Whatever the transaction, the bank must derisk the opportunity by taking additional time to know the customer. Transactions – particularly innovative ones – are easier to lock down if the number of players at the table is minimized.
- By opening up new markets, banks can increase their loan book and market share considerably, thereby enhancing returns, strengthening their profile, and contributing to the sustainable development of Kenya as a whole.

While the M-KOPA deal has worked well for CBA, it has not yet translated it into a formal strategy designed to seek new customers or provide new loan products. As



CBA acknowledged, a huge untapped opportunity exists to increase its loan books and cross-sell between M-KOPA and its customer database.

Institutionalizing innovation is a lot harder than completing one-off transactions. Banks need to deploy human resources and time to reflect and assimilate learnings from such positive, innovative transactions if the full potential of expanded market share, enhanced market standing, increased returns and growing loan books are to be fully realized.

