Overview

Launched in 2011, M-KOPA provides a way for low- or variable-income and underbanked customers to purchase household assets, such as fridges and televisions, on a pay-as-you-go (PAYG) basis. For those without a bank account or formal sector salary wages, credit is often unavailable, forcing them to pay the full cost upfront. The M-KOPA model of PAYG micropayments addresses this barrier and puts asset ownership within reach.

Micro asset financing enables customers to pay for an asset, such as a smartphone, in small instalments over a longer period. The financing plan is secured against the asset provided by M-KOPA (in this case the handset), which is automatically “locked” if payments cease, avoiding costly and cumbersome repossession processes. Customers are also able to get immediate access to a smartphone, avoiding the high upfront retail cost, and pay for it in a way that is better suited to their income level and cash flow.

M-KOPA: Applying the pay-as-you-go model to smartphones in Africa

Product launch
2020

Countries
Kenya, Nigeria, Ghana and Uganda

Target market
Underbanked customers with variable incomes and limited access to credit

Current reach
• One million smartphone customers reached between 2020 and 2021
• 75% of customers are first-time 4G smartphone users
• 40% of customers have purchased a smartphone for the first time

Concept
Mid- to high-end 4G smartphones made available to customers on a pay-as-you-go basis, which they pay for in daily micropayments via mobile money and other digital payment platforms. The product uses remote-locking technology and involves a wide range of partners.
M-KOPA: Applying the pay-as-you-go model to smartphones in Africa

M-KOPA launched in Kenya providing off-grid households with access to solar home systems (SHS), leveraging the country’s ubiquitous M-PESA mobile money accounts for micropayments. Since 2011, it has connected more than a million households in Sub-Saharan Africa to solar energy. The company now offers a range of products using this model, including energy-efficient lights, fridges, TVs and smartphones, as well as financial services such as health insurance and cash loans. It has provided more than $600 million in financing for underbanked customers to purchase assets on a PAYG basis.

Key success factors

**Local sales agents** provide a direct distribution channel, especially in harder to reach areas. By recruiting and training some 8,000 local sales agents M-KOPA is able to expand its reach and increase adoption of smartphones on affordable financing plans.

**Remote-locking technology** enables a handset to be “locked” automatically if payments are missed. This not only encourages prompt payments, but also allows M-KOPA to reach customers who would otherwise not be deemed creditworthy because the smartphone is used as collateral.

**Mobile money** and other digital payment platforms offer an easy and convenient way for low-income and underbanked customers to make payments without travelling to a service centre to pay in cash. Data generated from a stream of digital payments enables M-KOPA to automatically monitor repayment via its platform which dually controls devices in times of non-payment.

**High demand** for smartphones and, in particular, good-quality mid- to high-end 4G handsets that offer, for example, a better camera. Demand has been highest in urban and peri-urban areas.

**Partnerships** have helped to keep costs low and enabled the offering to scale. This includes partnerships with MNOs to offer promotional data bundles, as well as distribution to MNO stores and franchises with other technology distributors. Partnerships with manufacturers have proved successful with advertising and providing 12-month warranties for repairs.

1. M-KOPA also received a GSMA Mobile for Development Utilities Innovation Fund grant in 2013
2. Cash loans are secured against an M-KOPA asset, which has been paid in full.
Product: the M-KOPA phone

M-KOPA offers a range of branded mid- to high-end Samsung and Nokia 4G smartphones. To purchase an M-KOPA phone, which is available through M-KOPA agents, a customer needs to show identification, have an active digital payment account (such as mobile money) and pay a deposit.

To encourage repayment and avoid the costly process of repossession, M-KOPA phones use a secure locking system embedded in the hardware, enabling the company to “lock” the smartphone if payment milestones are not met. This means that the handset itself (apart from making emergency phone calls and payment top-ups) no longer functions. Once a payment is made, the phone and all services are remotely unlocked again.

In Kenya, one of the most popular M-KOPA phones is a mid-tier Samsung A12, which is available to customers for a deposit of Ksh 4,499 (USD 40) (Figure 1). A micropayment plan is then set up, usually a daily payment plan linked to an active M-PESA account. For the Samsung A12, daily instalments of Ksh 70 ($0.60) over 12 months are needed to keep the phone unlocked. Once the payment is complete, the handset is permanently unlocked.

To purchase the same smartphone without financing would cost a customer Ksh 19,199 ($171), so this is a substantial reduction in the upfront cost (Table 1). The M-KOPA-financed Samsung A12 costs a customer a total of Ksh 30,049 ($268) over a 12-month period. This includes, a start-up bundle of 1GB and a daily bundle of 50 MB. The same daily bundle of 50 MB would typically cost the customer between Ksh 3,920 and Ksh 5,600 ($35-$50) over the same period. The total customer cost enables M-KOPA to cover the costs of the financing services, credit losses and their own capital costs.

It is worth noting that an ultra-low-cost smartphone in Kenya can be purchased upfront for around Ksh 4,500 ($40). This is roughly equivalent to the cost of the deposit for the M-KOPA-financed Samsung A12 (Figure 1). However, for customers wanting a higher quality handset, the M-KOPA micropayment plan makes it possible to access one sooner.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Illustrative cost comparison of Samsung A12 with and without M-KOPA financing over a 12-month period in Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M-KOPA-financed Samsung A12</strong></td>
<td><strong>Retail cost Samsung A12</strong></td>
</tr>
<tr>
<td>Upfront handset cost</td>
<td>$40</td>
</tr>
<tr>
<td>Data bundle 1GB + 50 MB daily</td>
<td>&gt;15Gb over 12 months</td>
</tr>
<tr>
<td>Micropayments (12 months)</td>
<td>$0.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$268</strong></td>
</tr>
</tbody>
</table>

1. Price varies depending on data bundle chosen.
Making smartphones more affordable

The PAYG model makes mid- to high-end 4G smartphones more affordable for lower-income customers in several ways:

**Lower upfront cost:** The deposit cost is substantially less than the full retail price, usually around 10 to 15 per cent of the total financed cost of the handset. The deposit is designed to ensure the phone is only offered to customers who are likely to make regular payments.

**Micropayments:** Payments are usually made over the course of a year through daily micropayments, starting at Ksh 40 for a Samsung A3-Core or a Nokia C01 Plus ($0.35). As long as a customer is “in credit” each day, no further payments are needed and the phone remains unlocked.

**Flexible plan:** The micropayment plan can be customised, allowing customers to pay for their phone depending on their income flow (e.g. daily, weekly or monthly). When customers have money, they can top up their account in advance. For instance, instead of paying 70 Ksh a day for the Samsung A12, which is equal to one credit for daily use, they can make a one-off payment of 700 Ksh and use their phone for 10 days without needing to top up. However, any missed payments following day 11 will result in the phone being locked until a top-up is made.

**Ability to cancel:** If a customer wishes to cancel the agreement, they can return the phone to an M-KOPA service centre. If returned within 30 days customers can reclaim the full deposit, or within 90 days they can reclaim 50 per cent. This provides customers with some assurance, in case of an economic shock, which may be especially important for those with volatile or uncertain incomes.

**Warranty:** Smartphones are provided with the manufacturer’s warranty for the first 12 - 24 months, depending on the brand. Through partnerships with accredited Samsung and Nokia OEMs, customers can return faulty devices to M-KOPA for free repairs during the warranty period. This ensures customers are not left paying for a faulty handset.

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**How to log into M-KOPA APP**

To enjoy the full functionality of the M-KOPA phone, a customer must log in on the M-KOPA app.

1. Switch on your M-KOPA phone.
2. Press the “CUSTOMER SUPPORT OPTIONS” tab.
3. On the next screen, press “M-KOPA” next select “NEW CUSTOMER OPTION”.
4. Now key in your ACCOUNT NUMBER then press CONTINUE.
5. An SMS will be sent to your number with the One-time Password (OTP). The OTP will auto-fill or you can enter it manually.
6. Once you enter the OTP the next page appears. Enter a PIN that’s easy to remember.
7. Now click “SUBMIT” to be redirected to the original log in page.
8. You can now log into the M-KOPA App using your ACCOUNT NUMBER and new PIN.

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**LIPA NA MOPESA**

<table>
<thead>
<tr>
<th>PAYBILL NUMBER</th>
<th>ACCOUNT NUMBER</th>
<th>Customer ID</th>
</tr>
</thead>
</table>

**CHRISTMAS IS HERE AND SO ARE OUR SPECIAL OFFERS**

**GET 1GB FREE**

with every M-KOPA SMARTPHONE

**+50MB DATA DAILY**

Promotions valid until 31/12/2020.

Terms and conditions apply.

We offer smartphones, tvs, solar lights, solar microwaves and many more if these everyday items you need for your lifestyle and business.

**M-KOPA customer care is just a call away**

**Call us on**

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Available at all M-KOPA shops and selected Samsung shops.

*Terms and conditions at m-kopa.co.ke*
Achieving sustainability and scale

To date, uptake of smartphones has been high and repayment rates have proven to be better than for SHS. This is due, in part, to how frequently and intensively smartphones are used, and that a large proportion of M-KOPA customers use the phone for business purposes (estimated as nearly 50% across markets). There is, therefore, a strong motivation to make the payments and achieve full ownership. According to M-KOPA, repayment rates for smartphones are typically 90 per cent or more.

There are several other factors that incentivise customers to keep up with their payments, including:

- **Lower risk:** The remote locking technology lowers the risk of non-payment for M-KOPA by incentivising customers to keep up with their payments.

- **Payment penalties and rewards:** In Kenya, M-KOPA’s largest market, every month of delayed payments generates a penalty of five credits. Conversely, every month a payment is made early, the total cost is reduced by five credits.

- **A path to credit:** Data on repayment rates can be used for credit scoring, enabling customers to access cash loans from M-KOPA once the smartphone is paid in full, with the phone resecured as collateral.

Digital payments, especially via mobile money, are convenient for customers who can pay from anywhere and do not need to use cash. For M-KOPA, they enable payment data to be tracked immediately, triggering automatic device locking in the event of non-payment.

**Partnerships have been key to success.**

By partnering with MNOs, including Safaricom, MTN and Airtel, M-KOPA has expanded its reach significantly, offering financed M-KOPA smartphones with data bundles at MNO stores and franchises. In Kenya, the partnership extends to Samsung, which supported with awareness and on the ground activations for the financed phone in December 2020.

M-KOPA’s partnerships with MNOs are mutually beneficial and likely to power continued expansion. By increasing the penetration of 4G smartphones in their markets, M-KOPA is catalysing a transition from 3G and even 2G phones. This supports MNO strategies to shift away from maintaining 2G and 3G networks in their markets, and drives acquisition of new data customers. In markets where data bundles are provided, customers are also likely to have experienced the benefits of using mobile internet and to want to continue using it.

“With M-KOPA’s model, everybody is welcome. There’s no upfront scoring; if you can pay the upfront deposit, that’s all we require.”

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M-KOPA Chief Commercial Officer
Impact

To date, demand for mobile internet has been greatest with those living in urban and peri-urban areas and those with somewhat higher incomes than their SHS customers. M-KOPA estimates that around 45 per cent of all customers use the smartphone for business purposes and the majority are informal workers earning $5.50 or less a day. While there has been some uptake among female customers, there is an opportunity to do more to reach this segment. For instance, women only represent 30 per cent of the current customer base.

An independent survey conducted among M-KOPA smartphone customers in Kenya and Uganda in early 2021 provides some insights into the immediate impact of owning a smartphone.

Higher incomes

Across Kenya and Uganda, almost half of all customers use their phone to start or support a business. Of those using the phone for business purposes, 60 per cent of respondents in Uganda and 75 per cent in Kenya reported an increase in income as a result.

Supporting education

In both countries, 38 per cent of households with children attending school reported that the children used the M-KOPA phone for study, including online classrooms and educational content.

"The phone has helped me to run my business smoothly. I’ve been able to make more money because my farmers get the right pictures."

M-KOPA phone customer, Kampala, Uganda

Digital inclusion

<table>
<thead>
<tr>
<th>Using mobile internet</th>
<th>Before M-KOPA phone</th>
<th>With M-KOPA phone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kenya</strong></td>
<td>71%</td>
<td>99%</td>
</tr>
<tr>
<td><strong>Uganda</strong></td>
<td>63%</td>
<td>97%</td>
</tr>
</tbody>
</table>

4. Survey results provided courtesy of M-KOPA. Data collected Q1 2021. Sample size of M-KOPA phone customers: Kenya n=150, Uganda n=134
Barriers to reaching underserved customers

Where there is no mobile money, the unbanked are harder to reach.
In markets such as Nigeria, where mobile money is still nascent, M-KOPA has had to leverage alternative payment platforms linked to bank accounts, such as Paystack and Quickteller. This means that only those with formal accounts and access to cash-in/cash-out agent banking networks can benefit. However, in markets such as Kenya, Ghana and Uganda, where mobile money penetration is high, there is strong uptake of M-KOPA smartphones despite lower customer purchasing power.

Rural customers are harder to reach.
Although M-KOPA has substantial experience in rural distribution through their solar home systems, the uptake of their financed smartphones has been lower in rural areas than in urban and peri-urban areas. The mid- to high-end smartphones may be perceived as less relevant by rural customers, not sufficiently robust for the rural environment or the offering may simply be better suited to the needs of urban residents. Plus, there is a less extensive distribution network in rural areas.

Reaching low-income customers remains a challenge.
Although M-KOPA phones offer a way for many lower-income customers to own a smartphone, the cost of the deposit is still prohibitive for many, especially women. Those with highly variable or unpredictable income may find regular micropayments challenging, or they may prefer to save and purchase an ultra-low-cost smartphone without financing.

Low digital skills can limit uptake.
Smartphones, with their touchscreens, apps and additional features, require a higher degree of digital skills than basic or feature phones. This may limit the uptake of smartphones to some extent. However, for those upgrading from a low-end smartphone, digital skills are less likely to be a challenge.
We would also like to thank the team at M-KOPA for their numerous contributions to this case study.

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