2016
The State of Mobile Money in Sub-Saharan Africa
Over the last decade, global mobile money adoption has been driven by growth in Sub-Saharan Africa.

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deplosments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>2</td>
<td>140</td>
</tr>
<tr>
<td>Global</td>
<td>7</td>
<td>277</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2016</th>
</tr>
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<tbody>
<tr>
<td><strong>Countries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
<td>Global</td>
<td>5</td>
<td>92</td>
</tr>
</tbody>
</table>
With more money mobile accounts than traditional bank accounts, financial inclusion has significantly improved in Sub-Saharan Africa.

Growth of registered mobile money accounts in Sub-Saharan Africa, 2006 to 2016

*Source: AFDB, The Banking System in Africa: Main Facts and Challenges. SSA bank accounts per 1,000 adults: 334.5*
Mobile money account adoption in Sub-Saharan Africa has outpaced growth in the rest of the world

Growth of 90-day active mobile money accounts, 2011 to 2016

*Sub-Saharan Africa comprises: East Africa, Central Africa, Southern Africa, West Africa

Note: Rest of the world excludes Sub-Saharan Africa
More than 40% of the adult population is using mobile money on an active basis in seven Sub-Saharan African countries.
Regionally, mobile money adoption is being driven by growth in West Africa.

<table>
<thead>
<tr>
<th>Growth and share of 90-day active accounts</th>
<th>Share of value of transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 mn</td>
<td>2011</td>
</tr>
<tr>
<td>8%</td>
<td>98%</td>
</tr>
<tr>
<td>92%</td>
<td>2%</td>
</tr>
<tr>
<td>13 mn USD</td>
<td>18 mn USD</td>
</tr>
<tr>
<td>100 mn</td>
<td>2016</td>
</tr>
<tr>
<td>29%</td>
<td>87%</td>
</tr>
<tr>
<td>71%</td>
<td>14%</td>
</tr>
<tr>
<td>66 mn USD</td>
<td>66 mn USD</td>
</tr>
</tbody>
</table>

West Africa Rest of Africa
Sub-Saharan Africa has a smaller gender gap to bridge than other emerging regions

Mobile money gender gap = (% of men +15 with a mobile account - % of women +15 with a mobile account) / % of men +15 with a mobile account

*Source: GSMA Connected Women – Mapping the mobile money gender gap: Insights from Cote d’Ivoire and Mali, April 2017
Transactions have diversified from airtime top-ups and P2P transfers to more sophisticated use cases…

Sub-Saharan Africa
Product Mix
2011 to 2016

Key

- **Airtime top-up**
- **Bill payment**
- **Bulk disbursement**
- **International remittance**
- **Merchant payment**
- **P2P transfer**

### Values, 2011
- Ecosystem: 11%

### Volume, 2011
- Ecosystem: 4%

### Values, 2016
- Ecosystem: 24%

### Volume, 2016
- Ecosystem: 17%
...which have been driven by a significant rise in bill payments

Ecosystem transaction volumes, 2011 to 2016

Ecosystem payments almost quadrupled between 2014 and 2016, driven by bill payments

Note: CAGR stands for Compound Annual Growth Rate. CAGR represents the mean rate of growth between two time periods, assuming that growth has been compounding over that time period.
Incoming transactions show a prevailing reliance on agents, while cash digitisation has increased.


- **2013**
  - 92.7% Cash-in transactions
  - 6.3% Bank-to-Wallet transactions
  - 0.7% International Remittances
  - 0.3% Bulk disbursements
  - Total: US$ 2.9 billion

- **2016**
  - 81.7% Cash-in transactions
  - 13.3% Bank-to-Wallet transactions
  - 0.7% International Remittances
  - 4.4% Bulk disbursements
  - Total: US$ 5.8 billion
As revenue continues to rise, agent commission distribution allows for greater employment and income generation for SMEs.

Between September 2015 and June 2016, mobile money revenue in Sub-Saharan Africa grew by **27%**.

Leading mobile money operators in Sub-Saharan Africa paid out **47%** of their revenues as commission. This amounted to over US$ 400 million in 2016.

Source: GSMA SOTIR 2016 Data
A ten-fold increase in agent reach over five years may have driven mobile money growth in Sub-Saharan Africa...

<table>
<thead>
<tr>
<th></th>
<th>Agents per 1,000 adults</th>
<th>Active agents in Sub-Saharan Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2011</strong></td>
<td>0.18</td>
<td>~100,000</td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td>1.75</td>
<td>~1.5 million</td>
</tr>
</tbody>
</table>

Note that this is not the number of unique mobile money agent outlets, but rather the sum of the agent outlets providing cash-in and cash-out services for the mobile money services that are available globally. In many markets, individual outlets may serve several mobile money service providers. This practice is more pronounced in mature mobile money markets, particularly where competition among service providers is high. For that reason, the number must be interpreted with care, as it does not reflect the number of unique mobile money agent outlets. Agent outlets and registered agents are used interchangeably.
...with an increasing number of enabling markets also allowing for a rise in mobile money use

Note: the methodology that determines whether a country has enabling or non-enabling regulation is due to change, which will impact the figures shown above. Regulation in Sudan is currently under development.
Mobile-enabled insurance and savings services have seen growth across the region…

60 Mobile money-enabled insurance services in 17 Countries

As at June 2016

18 Mobile money-enabled savings services in 10 Countries

As at June 2016

Note: the methodology that determines whether a country has enabling or non-enabling regulation is due to change, which will impact the figures shown above. Regulation in Sudan is currently under development.
...while mobile credit services have made great strides in mature mobile money markets, particularly in Kenya and Tanzania

Mobile credit services in sub-Saharan Africa

<table>
<thead>
<tr>
<th>2011</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 services</td>
<td>39 services</td>
</tr>
<tr>
<td>1 country</td>
<td>11 countries</td>
</tr>
</tbody>
</table>

Kenya

<table>
<thead>
<tr>
<th>Country</th>
<th>2012</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-Shwari Kenya*</td>
<td>Established</td>
<td>Number of accounts</td>
</tr>
<tr>
<td>M-Pawa Tanzania*</td>
<td>US$ 1.3 billion</td>
<td>US$ 22 million</td>
</tr>
<tr>
<td>Non-performing loan ratio</td>
<td>1.92% (Kenya: 5.3%)</td>
<td>8.52% (Tanzania: 8.3%)</td>
</tr>
</tbody>
</table>

*As at June 2016

*Source: Daily Monitor Uganda 16 August 2016 - Groundbreaking: When the mobile phone became a bank
M-Shwari 2014 NPL ratio: 5.6%; Kenya 2014 NPL ratio: 10.5%
Mobile money use has generated positive externalities for other industries, especially in providing services for rural communities.

<table>
<thead>
<tr>
<th>Water and sanitation</th>
<th>Tanzania</th>
<th>Education</th>
<th>Côte d’Ivoire</th>
</tr>
</thead>
<tbody>
<tr>
<td>TZS 1 billion per month*</td>
<td>additional revenue collected via mobile money by the Dar es Salaam Water and Sewerage Corporation in 2013, increasing revenue by 38%</td>
<td>99.3%</td>
<td>the proportion of 1.7 m secondary school students who paid their annual school registration fee via mobile money in 2015-2016</td>
</tr>
<tr>
<td>Energy</td>
<td>East Africa</td>
<td>Agriculture</td>
<td>East Africa</td>
</tr>
<tr>
<td>Over 500,000**</td>
<td>the number of household solar power kits sold by M-KOPA in Kenya, Uganda and Tanzania by April 2017</td>
<td>35,000^</td>
<td>the number of farmers in Kenya and Tanzania who were receiving support through Vodafone’s Connected Farmer Alliance as of October 2014</td>
</tr>
</tbody>
</table>

*Source: The Citizen - Dawasco hails M-Pesa billing, 10 July 2013
**Source: M-KOPA Solar Press Release: M-KOPA Connects Half a Million Homes, 27 April 2017
^Technoserve – Connected Farmer Alliance
Opportunities remain for mobile money growth across Sub-Saharan Africa, based on total customer base per deployment

90-day activity rate on GSM customer base per mobile money deployment in Sub-Saharan Africa, June 2016

118 million
the number of 90-day accounts mobile money services could gain if they achieve activity rates of 40%

Note: This graph shows mobile money deployments in Sub-Saharan Africa with activity rates >2%
Calculation: active 90-day mobile money customers / mobile connections (unique subscriber) for every operator
As mobile money adoption and use continues to rise, future growth can be unlocked by addressing a number of key drivers

**INVESTMENT**

In addition to high operational expenditure and full buy-in from senior leaders, constant investment is necessary to ensure growth

**INFRASTRUCTURE & TECHNOLOGY**

Harmonised APIs can improve seamless integrations, stimulating new and complex use-cases and products for users

**POLICY & REGULATION**

Maintaining a proportional risk-based approach to regulation to ensure the service can continue to reach low-income individuals

**GENDER**

Sub-Saharan Africa has a smaller gender gap than other regions, but ~225 million women still lack a mobile money account

**RURAL**

Only 17% of the addressable market has been captured in rural markets, remaining a source of untapped potential for providers

**ECOSYSTEM DEVELOPMENT**

Interoperability at the regional level would enable a rise in ecosystem transactions, such as cross-border remittance payments