

A photograph of a rural African water collection point. In the center, a wooden structure with a horizontal beam is used to draw water from a well. Several women and children are gathered around, some carrying water jerrycans on their heads. A donkey is harnessed to the structure on the left. The ground is dirt, and there are many yellow and blue plastic jerrycans scattered around. In the background, there are traditional thatched-roof huts and trees. The sky is overcast.

# Mobile Financial Services for Rural Water in Africa

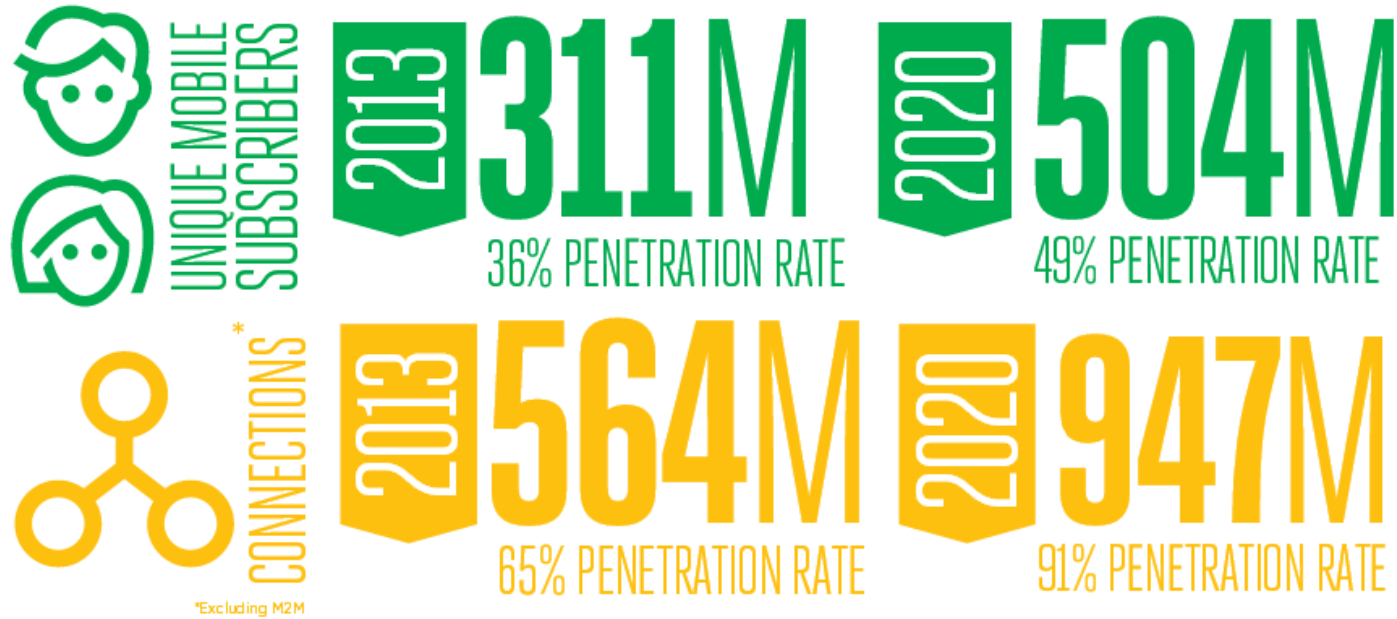


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Utilities

# A Booming Mobile Economy in Sub Saharan Africa



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Accelerating moves to mobile broadband networks and smartphone adoption

**52%**  
3G connections to increase from 15% of total in 2013 to 52% by 2020

By 2020 there will be **525M** smartphones, up from only 72 million at the end of 2013

Data traffic in SSA to grow by 20 times out to 2019, twice the global average

## Mobile addressing economic and social challenges across the region



Delivering digital inclusion to the still unconnected populations  
**Mobile internet subscriber penetration: 17% 2013, 37% 2020**



Delivering financial inclusion to the still unbanked populations  
**130 live services in 38 markets across SSA as of September 2014**



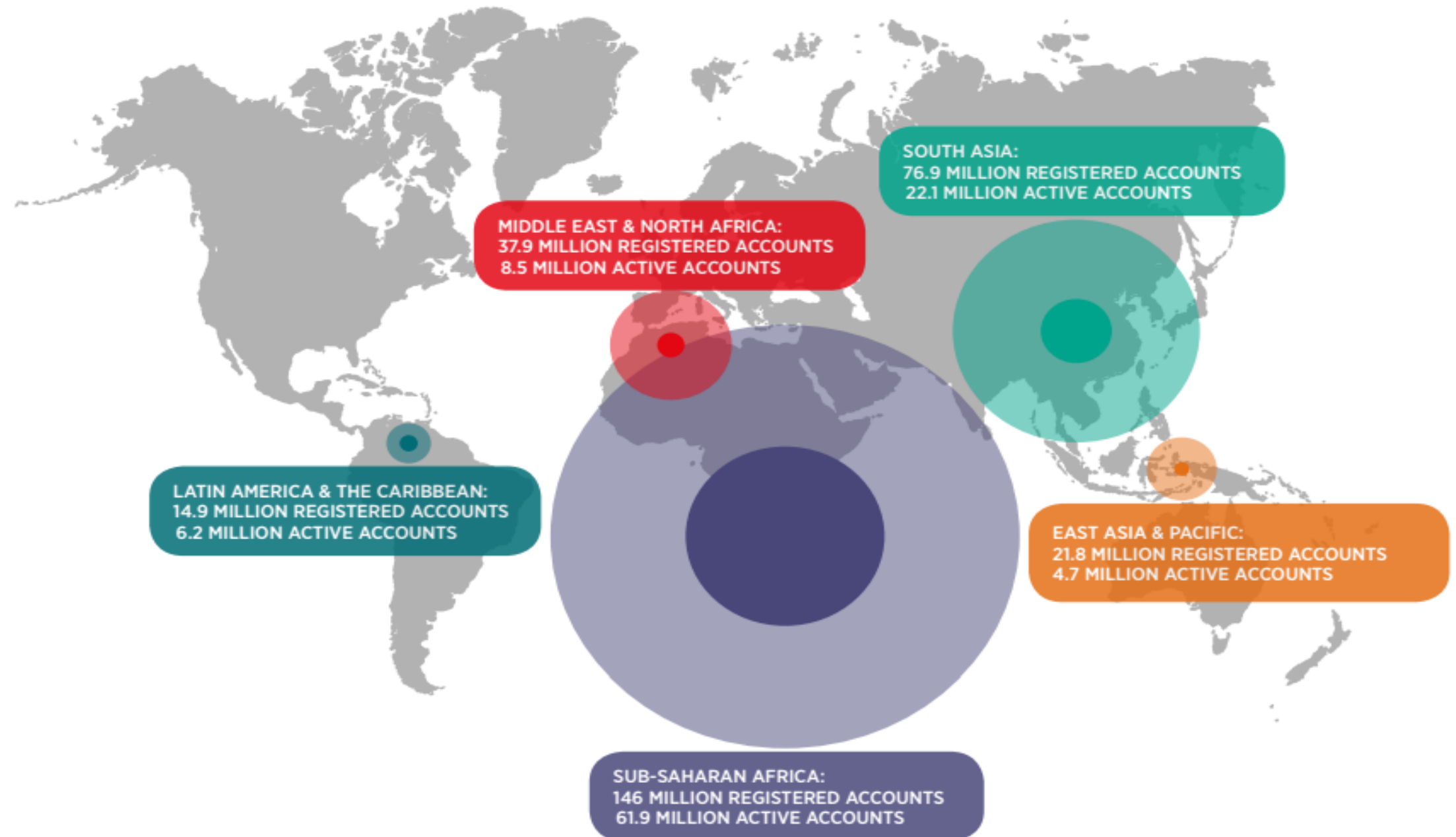
Delivering innovative new services  
**Number of M2M connections to grow at a CAGR of 26% per annum out to 2020**

# Up to 300 Million Mobile Money Subscribers (2014)



## Mobile for Development Utilities

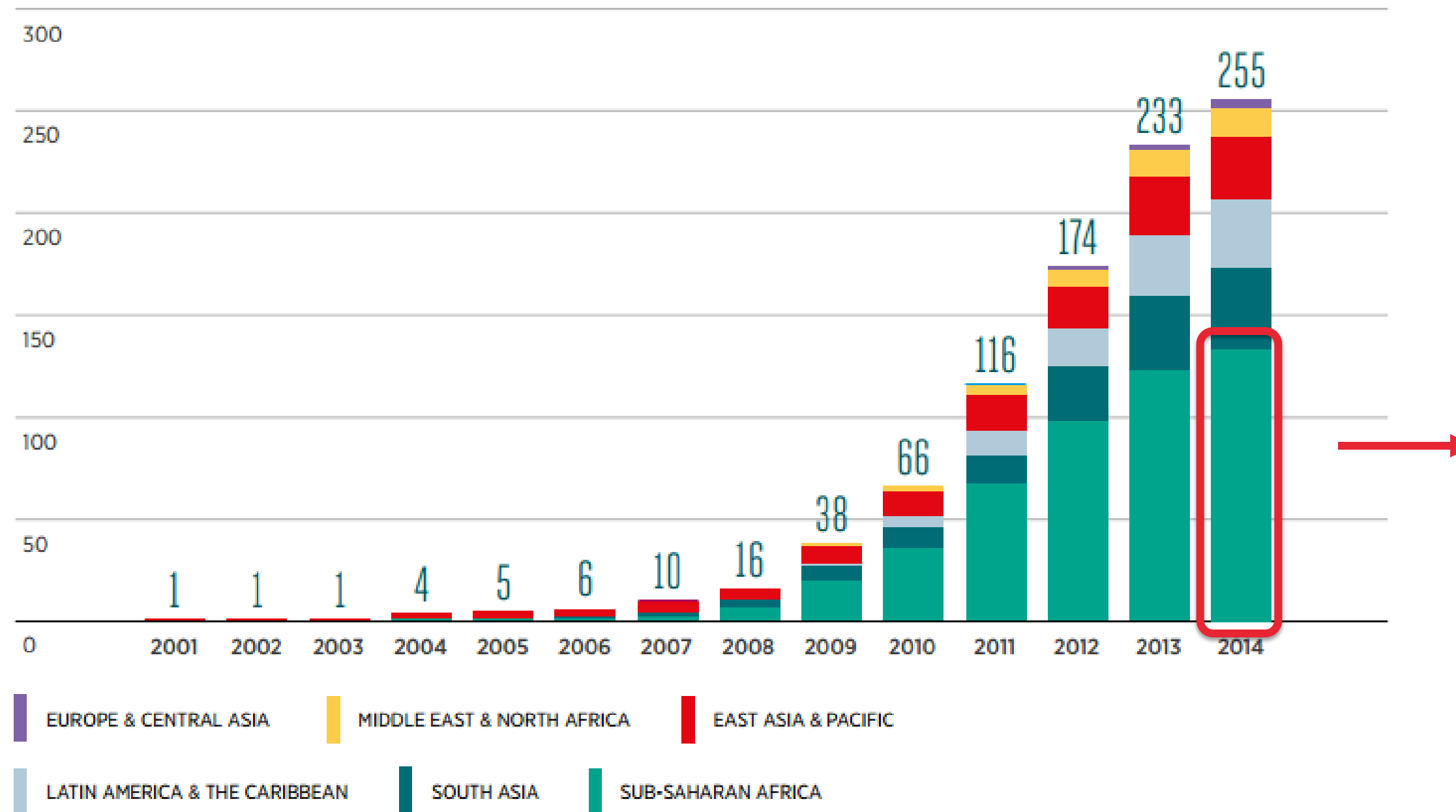
- Active mobile money accounts stands at 103 million (as of December 2014)
- 21 services now have more than one million active accounts
- Important potential for future growth as this only represents 8% of mobile connections in the markets where mobile money services are available



# Rapidly Growing Number of Mobile Money Services



**NUMBER OF LIVE MOBILE MONEY SERVICES BY REGION**  
(2001-2014; YEAR-END)

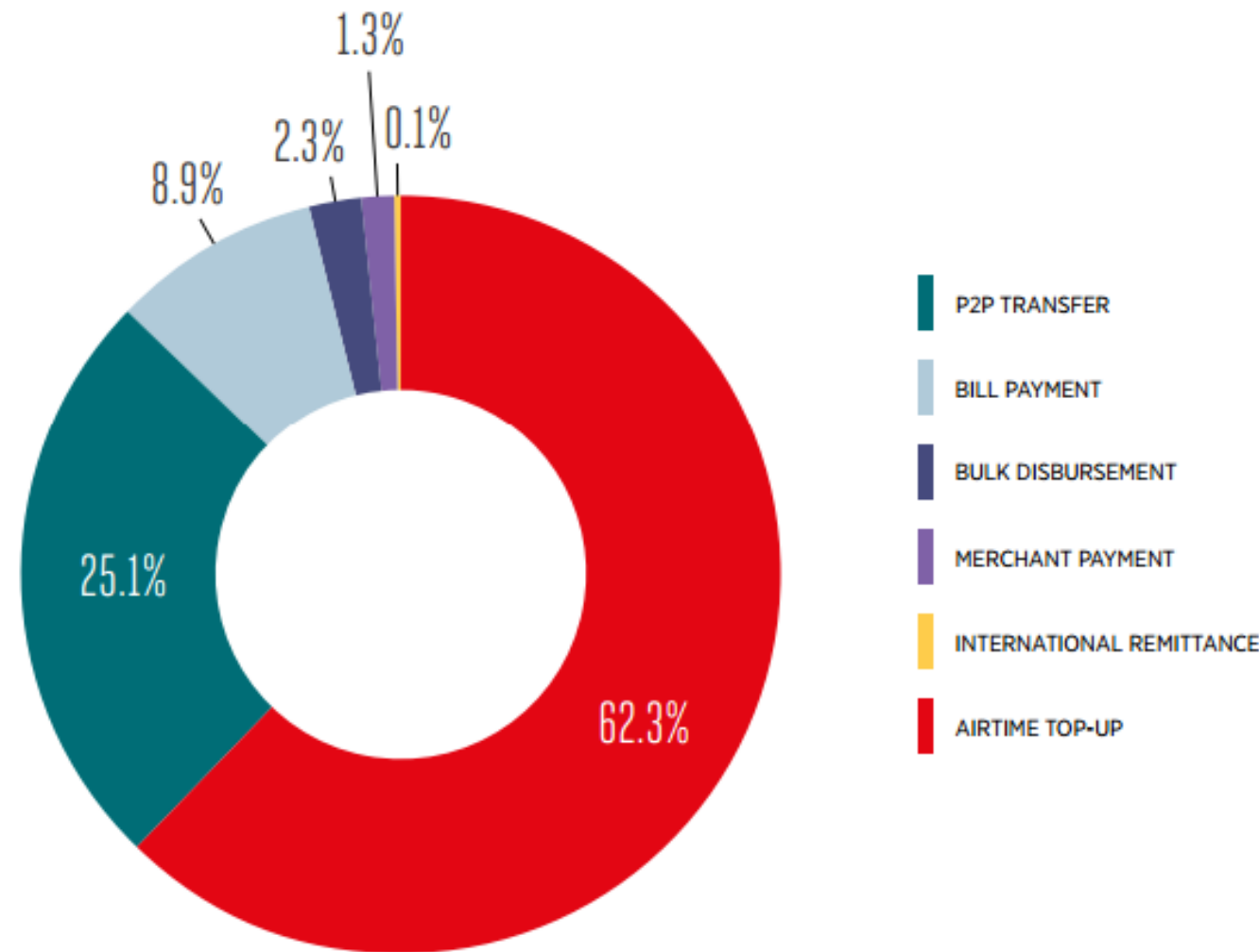


- By December 2014, 23.0% of mobile connections in Sub-Saharan Africa were linked with a mobile money account
- There are now more registered mobile money accounts than bank accounts in 15 SSA countries

# Bill Payments as an important product for increasing active usage of mobile money



GLOBAL PRODUCT MIX BY VOLUME (DECEMBER 2014)



- Mobile money users transacted a total of USD 16.3 billion through 717.2 million transactions (December 2014)
- Fastest growth in 2014 occurred in bulk disbursements, bill and merchant payments
- The number of bill payments through mobile money services increased by 7.2 million transactions during the year to December 2014

**Mobile payments help to break down the monthly billing and payment cycle into more manageable portions by allowing households to pay when, where, and how they want.**

# Lagging Mobile Money Penetration in Rural Areas



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- Beyond the global challenges of mobile money growth (ex. regulation, operational strategy), rural services are posing extra challenges: more dispersed populations, lower literacy levels, less access to basic infrastructure, and lower and often sporadic household incomes.
- Lack of clear mobile operators strategy: expansion of mobile money has tended to be a gradual diffusion of services beyond urban centres, rather than a strategic effort by providers to tailor services to meet the needs of rural customers.

# Off Grid Energy Driving Usage and Adoption of Mobile Money Services in Rural Africa



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### The Pay As You Go Model

Leveraging mobile services, a new generation of Energy Service Companies (ESCOs) are proposing **solar solutions under a pay as you go model**:

- Customers only pay a fraction of unit price (~10%) before installation;
- Pay for energy through daily or monthly instalments under a 1 to 3 years term;
- Remote control mechanism through GSM M2M and other wireless technologies;
- Technical support throughout the repayment period and beyond.

### Latest Data on Solar PAYG Uptake

- More than 350.000 PAYG home solar systems installed (mainly in East Africa)
- Since January 2014, more than US\$150 million invested in solar PAYG providers
- MKOPA (Kenya) processes more than 10.000 payments per day (second utility bill provider in the country)

# The Opportunity and Challenge of Mobile Payments for Off Grid Energy



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## The Opportunity:

- Mobile Payments have been essential to the development and adoption of innovative solar Pay As You Go models (remote digital payments capacity & building credit history for unbanked customers).
- Access to energy can act as the gateway for further financial services and financial empowerment

## The Challenge:

- PAYG adoption is streamlined in places where mobile money services are more mature (ex. East Africa). Elsewhere, customer education is needed to improve financial & mobile literacy.
- Charges on individual transactions can be a barrier – ESCOs can either absorb those fees or let customers pay for it depending on the market.



# Savings Group and Mobile Money in Africa – example of Airtel Uganda (2015)



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Aim: find an alternative and cost effective way to increase mobile money uptake in the rural women's segment (84% of the Ugandan population live in rural areas and mobile money penetration is lower there, especially amongst women)

Context: Savings groups are cited by Ugandans as the second most popular mechanism to save. Informal groups generally consist of 15-30 local community members who meet regularly to pool their savings and access credit

Solution: Airtel partnered with Grameen Foundation to design and launch a mobile money solution addressing the needs of savings groups and reduces their dependence on cash. Consumer insights research revealed that members of savings group have four primary needs: security, convenience, transparency and access to more credit

# The Synergies between Mobile Payments and Utility Access in Rural Areas



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## A virtuous relationship between mobile money and utility services

- Rural utility bill payments drive adoption of mobile money services (*add data from Mobisol Case Study*), while supporting new service delivery models

## A Compelling Value Proposition for Rural Customers

- Mobile Money service to pay bills reduces both travel time and costs for rural customers

## Payment Facility for Remote Users

- Opportunity for customers to pay according to their cash flow, as well as receiving micro-loans for asset purchase or maintenance
- Ability for governments to directly send subsidies (G2P – Government to Person) to customers mobile wallets

## Mobile Tools to Professionalize Rural Utility Services

- Facilitating Payment Collection for Agents and Water Service Providers
- Building Payment History on Customers, facilitating credit assessment
- Mobile Business Tools (accounting, customer relationship management) to support operations



**More information on our website**

**[http://www.gsma.com/mobilefordevelopment/programmes/  
utilities](http://www.gsma.com/mobilefordevelopment/programmes/utilities)**

**Q&A**