



# Cash-In Cash-Out Cross-Country Analysis: KENYA

"Wavinya - Airtime Seller". Photo by Kelvin Kariithi, 2018 CGAP Photo Contest



December 2020



# DISCLAIMER

This work was funded in whole or in part by CGAP. Unlike CGAP's official publications, it has not been peer reviewed or edited by CGAP. Any conclusions or viewpoints expressed are those of the authors, and they may or may not reflect the views of CGAP staff.

This slide deck serves as background research for the CGAP Focus Note '[Agent Network Journeys Toward the Last Mile: A Cross-Country Perspective](#)'.

# Agenda

- DFS uptake and usage – with a focus on rural areas
- Country specific findings and analysis – Practices, policy, and regulations
- Recommendations on applicability of principles





# Executive summary (1/2)

Kenya is a middle-income country with over 47 million people. In Kenya, CICO growth is happening around the urban clusters, growth of CICO in rural and remote clusters is significantly slower. Northern and western parts of Kenya have few agent outlets on account of limited economic activity; lack of basic infrastructure; and climatic and demographic nuances. The key events that led to financial accounts and agent network growth include the launch of M-Pesa in 2008, Agency Banking regulations in 2010, National payment systems regulations and abolition of agent exclusivity in 2014.

## Learnings from Kenya experience for other countries

### Key aspect

- Supportive and enabling policy environment, regulators' "test and learn" approach, and embracing technological innovations led to a flourishing digital financial sector in Kenya.
- Use case diversification leads to digital ecosystem development and helps providers maximize returns from the investments
- For the agent network growth, providers used a shared prosperity model to grow the CICO network significantly.

### Lessons

- Initial support to mobile money systems can lead to development of products and services that may accelerate financial inclusion and become stepping stones for use of full service accounts.
- The regulators may balance the innovation with risks and systemic stability to support market dynamism and thus contribute to a catalytic growth in access and uptake.
- Diversifying the revenue contribution outside of the core services of person-to-person transfers and cash-out, to other transactions such as bills, digital credit and savings, business transactions etc. helps providers increase revenues.
- More use cases for digital money enable providers to sustain the CICO business case.
- A shared prosperity model in agent networks is where the providers share a substantial portion of revenue earned with the agents.
- In the last seven years (2013-19), Safaricom shared, on an average, around one-thirds of commissions earned with the agents.



# Executive summary (2/2)

## Key recommendations

### **Principle 1: Enable rural CICO agents to generate more revenue streams**

- Reduce costs further through single float management using agent and customer interoperability frameworks.
- Add more services over and above CICO – tie-ups with physical distribution networks of e-commerce and e-citizen services.

### **Principle 3: Expand the range of people that can serve as CICO agents**

- Streamline the requirements for becoming an agent across banks and non-banks.
- Build tiered categories of agents to provide differentiated entry-levels of potential agents.
- Actively build the case for rural agent expansion through incentivization of service providers to expand to presumably less profitable areas to achieve critical mass.

### **Principle 5: Develop a data-driven strategy to close the gender gap in CICO access and use**

- Encourage providers to collect and report gender-disaggregated data of users and agents to assess and address gender disparities in access and supply of financial services.
- Build gender focus in design, monitoring and evaluation policies and projects on digital financial services for women. Report gender-disaggregated data sets to all stakeholders.

### **Principle 2: Make CICO agents more accessible to rural customers, as defined by the local context**

- Encourage providers to report geo-location data of agents, which may be compiled to assess the true spread of agent networks in rural and remote places.
- Focus on creating the right balance and interfacing between float-positive bank agents (and accounts) and float-negative MNO agents (and mobile wallets).

### **Principle 4: Identify and manage consumer protection and other risks posed by rural agents without stopping innovation**

- Implement customer protection, data protection, and cyber security acts through appropriate regulations.
- Build coherence amongst the domestic regulators to reduce opportunities for regulatory arbitrage around consumer protection.

### **Principle 6: Expand public and private partnership that share CICO agent networks**

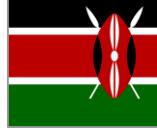
- Gradually shift all G2P and P2G transfers to digital platforms.
- Extend digitization of rural public and private utility service provider payments to use OTC cash-in payments as a stepping stone to DFS ecosystem expansion.
- Encourage the providers to expand rural outreach networks through subsidies in the form of set up costs, additional commissions, one time costs, investments in infrastructure etc.



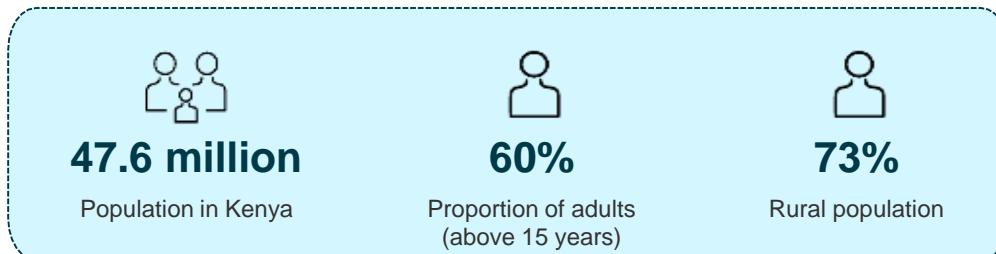
Video marketing with tablet, Kenya. Photo credit: Hailey Tucker, 2017 CGAP Photo Contest

## DFS uptake and usage – with a focus on rural areas

Urban agglomerations in Kenya are quite clustered, financial service centers and CICO growth happened around these urban clusters



## Demographics

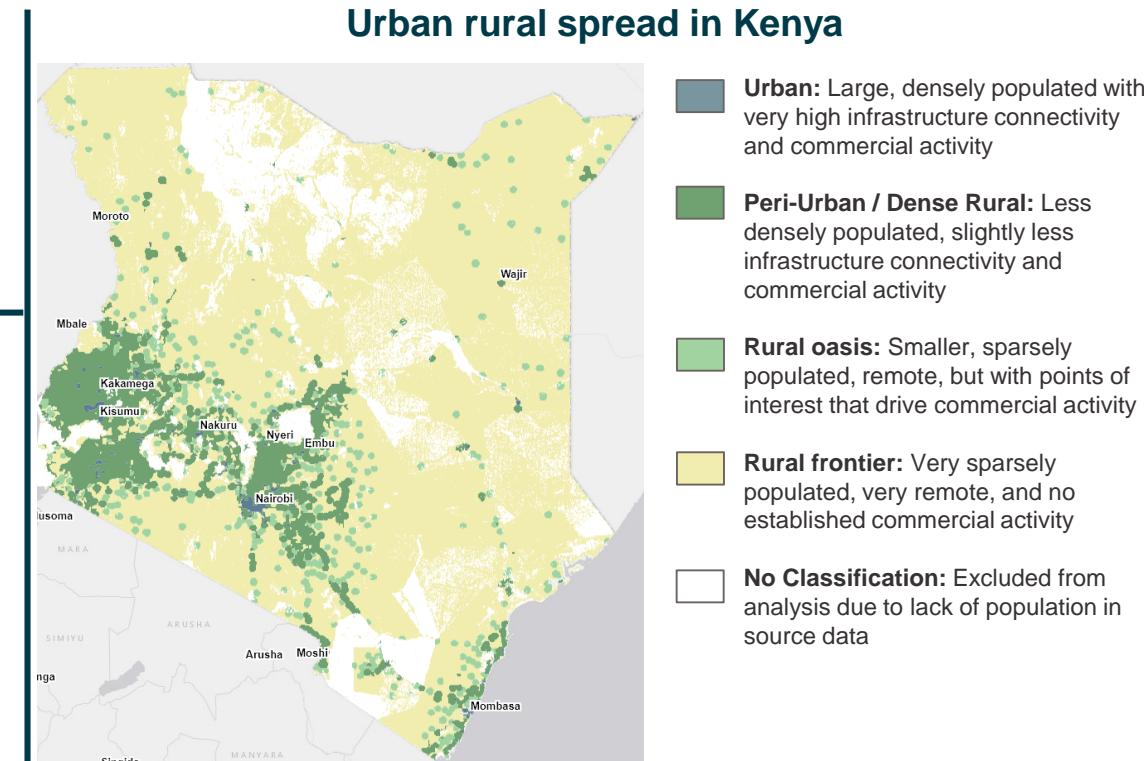


Source: World Bank, 2018; KNBS, 2019

- As per the Kenya National Bureau of Statistics (KNBS), urban areas have a population of 2,000 and above within the administrative boundaries. All other areas are considered rural.
  - The urban centers developed alongside the major railway stations and postal centers. Along these urban centers, the financial service centers, including post banks, proliferated.
  - People from rural Kenya migrated to urban centers in search of better economic prospects and opportunities. However, they had a deep connect with their family that stayed back in the rural areas. Whatever little earned or saved was sent to the family in the rural areas to sustain and develop the standards of living.
  - As financial services, especially banking, was perceived to be for the affluent, the low- and moderate-income people used informal mechanisms to save and send money to their families. While affluent people used banks and postal money order to save and transfer money, poor used informal mechanism such as *chamas* and SACCOs to save, and bus or post mails to send money.

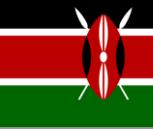
<sup>1</sup>.Population data compiled from BPS, [Statistical Yearbook of Indonesia 2019](#)

2. Urban, Per-Urban, Rural Oasis and Rural Frontier definitions taken from BCGs Geospatial Analysis for CICO Agents in Indonesia

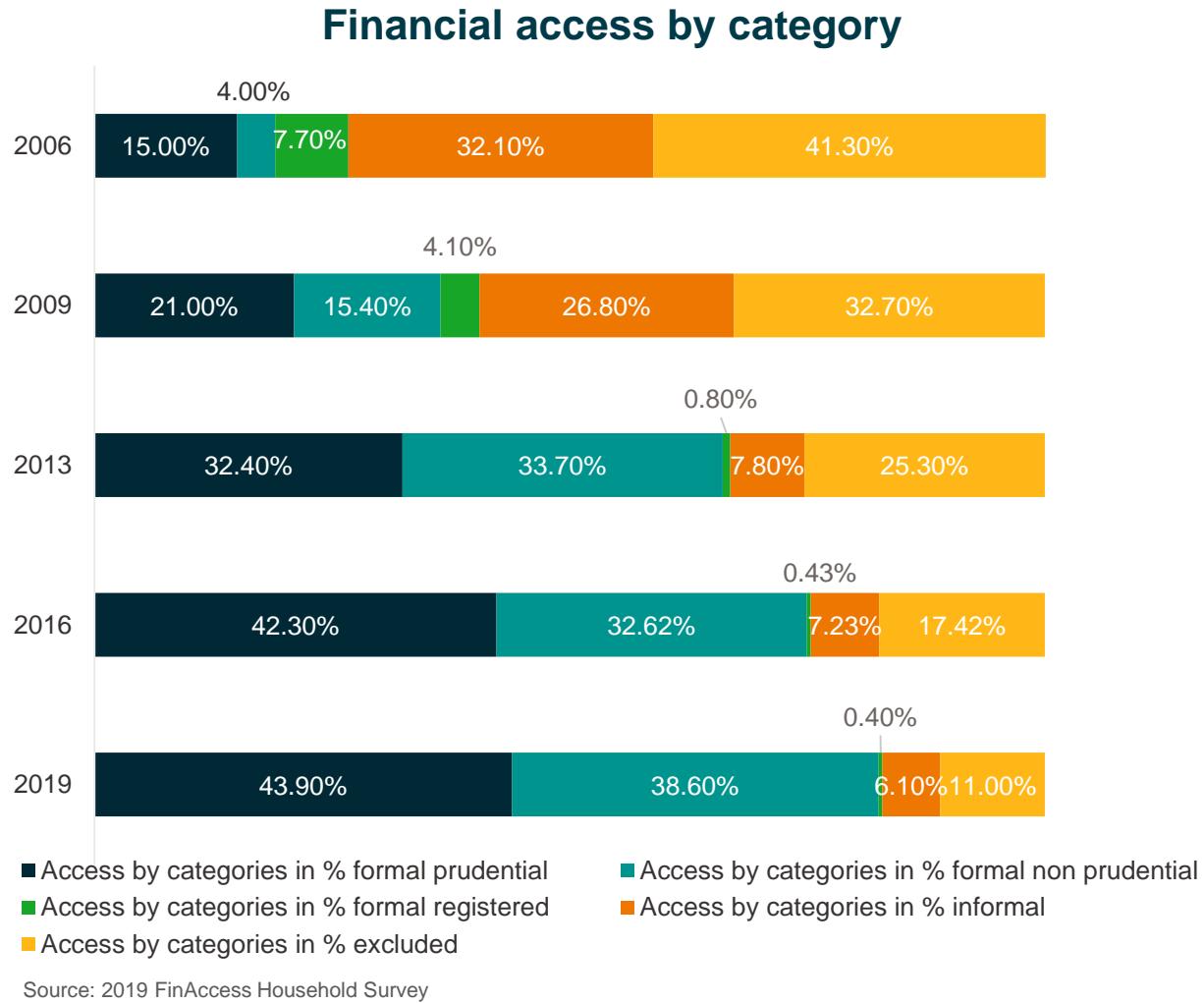


Source: BCG CICO Economics Research Kenya, 2019

- There is a very high concentration of population in the urban clusters. Northern and Western Kenya is sparsely populated.
  - Transportation and telecommunications infrastructure growth happened around the clustered urban agglomerations in Kenya.
  - From 1999 to 2007, advances in the financial sector led to deepening of access, increasing usage, and enhancing uptake of formal financial services.



# 2007 onwards, financial access and uptake increased significantly on account of conducive policy and regulations and advances in mobile money



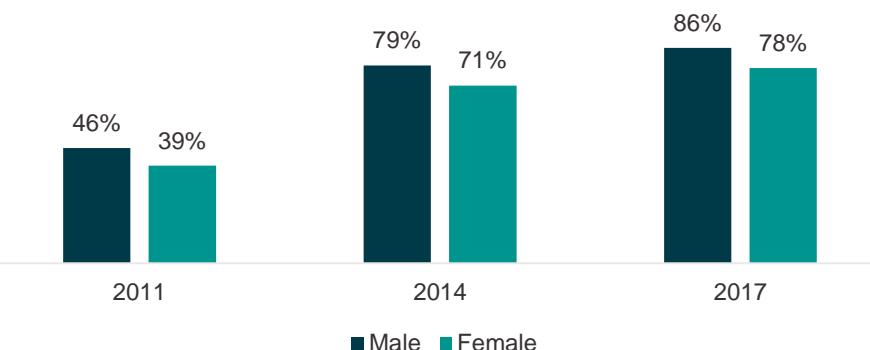
- Kenya saw an increased financial access from 27% in 2006 to 83% in 2019 - an increase of 56% in the past 13 years.
- Nine out of 10 Kenyans are able to access some form of financial services due to the ubiquity of mobile money. 79% of people in Kenya have a mobile money account.
- From 2008 to 2014, adoption of mobile money helped approximately 2% of all Kenyan households escape poverty<sup>#</sup>.
- Informal groups used to be a key source of financing in Kenya. However, in the last three years (2016 to 2019), the usage of informal channels has declined from 32% to 6%.

Source: <sup>#</sup> The long-run poverty and gender impacts of mobile money, Jack and Suri, 2016



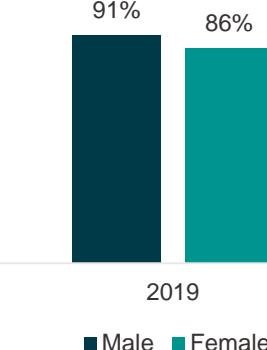
# Women contribute significantly to the Kenyan economy, yet there are barriers for them to access and use finance

## Financial access by gender (2011, 2014, and 2017)



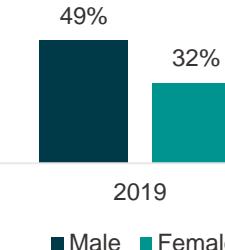
Source: Global Findex database

## Mobile ownership



Source: GSMA Mobile Gender Gap, 2019

## Mobile internet usage



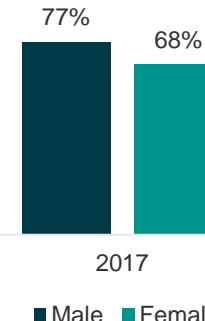
Source: GSMA Mobile Gender Gap, 2019

## Access to mobile money account (2017)



Source: Global Findex database

## Used a mobile phone or the internet to access an account (2017)



- The gender gap in access to finance from 2011 to 2017 has increased, from 7% to 8% (Global Findex 2011, 2014, and 2017).
- Lack of digital savviness, lower level of literacy and numeracy, lack of access to devices and internet, are some of the barriers<sup>#</sup> why women in Kenya are unable to realize full benefits of the digital financial inclusion.
- Lack of awareness of formal and digital financial services\* results in women using semi-formal or informal financial services (especially at lower-end of income class, and in peri-urban and rural areas).
- While there is a gender policy that emphasizes on collection and analysis of data and information required for the design, monitoring and evaluation of policies and projects for women. However, the policy is not directly aligned to digital financial inclusion of women in Kenya.

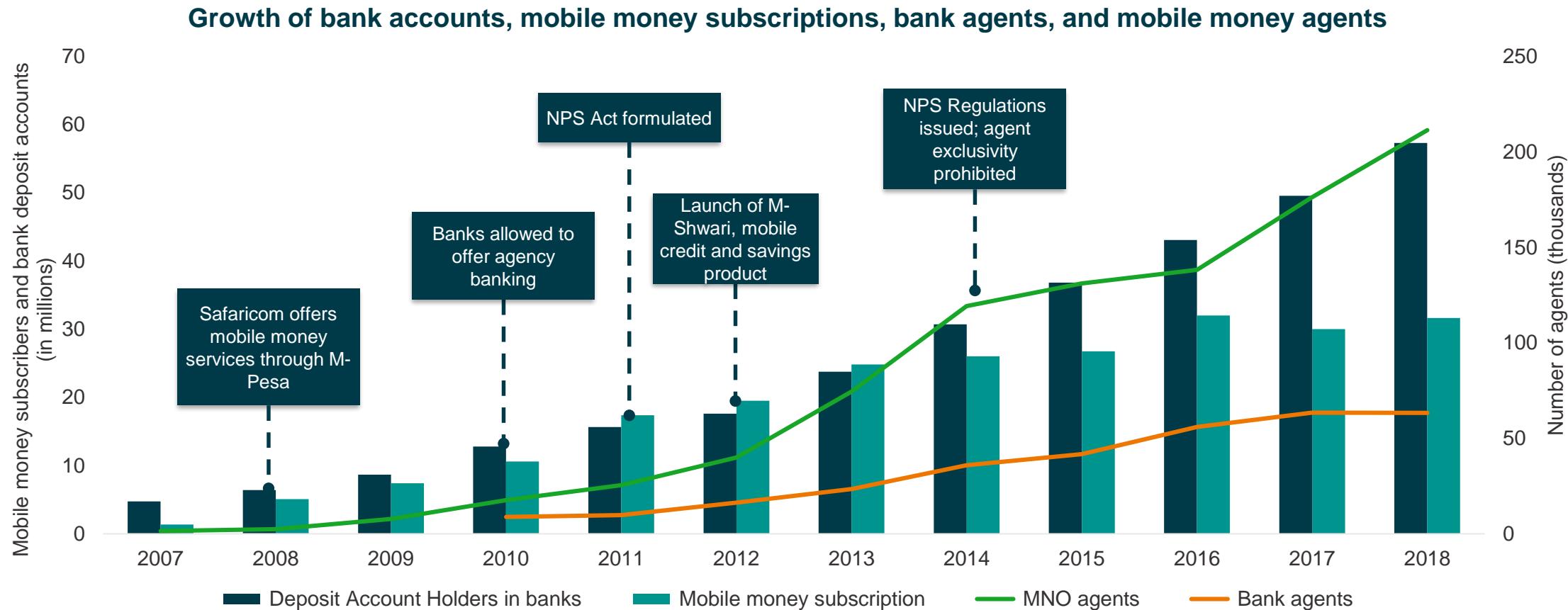
Source:

# GSMA (2019), [Accelerating Digital Literacy: Empowering women to use the mobile internet](#)

\* MSC, SPTF, Smart Campaign, and AFD (2019). [Making digital credit truly responsible: Insights from digital credit in Kenya](#)



Since 2007, bank accounts and mobile money subscriptions have been steadily growing alongside the growth in CICO networks.

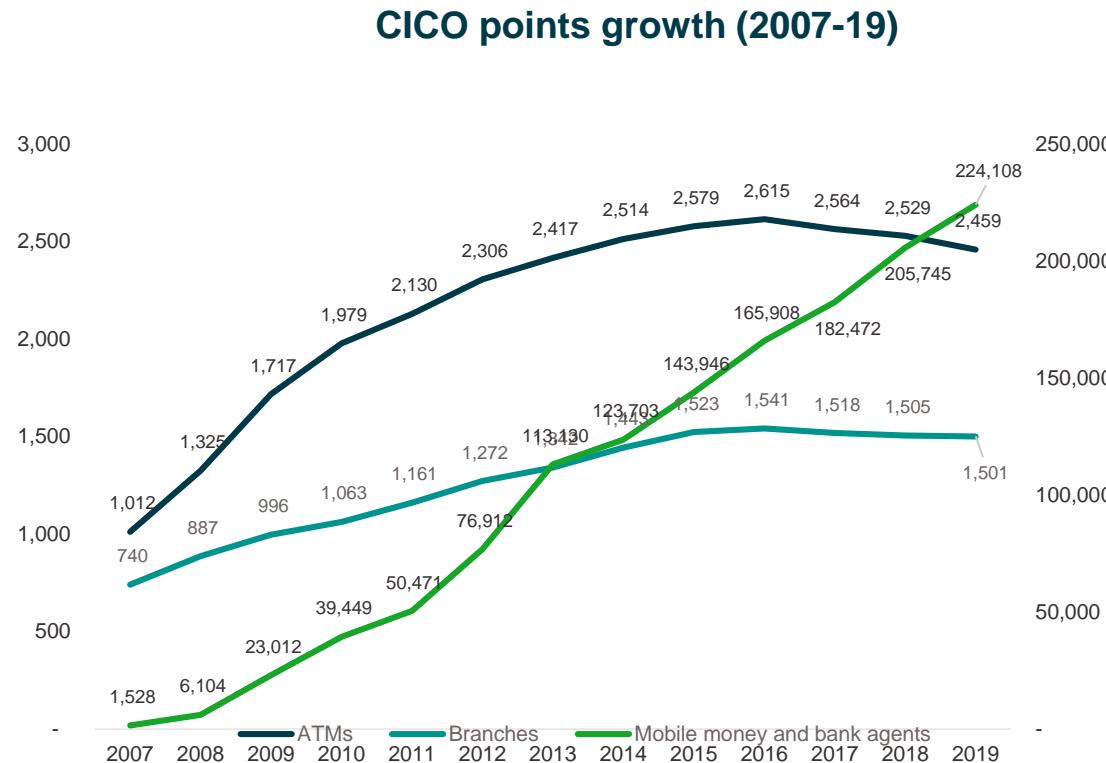


Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

- Bank agent numbers did not grow as fast due to higher float requirement to serve larger transaction caps.
- The deposit accounts increased significantly on account of M-Shwari, which is a bank account from NCBA, accessed entirely through M-Pesa.



Despite the growth of CICO points between 2007 to 2018, the rural areas are still underserved



Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

- Since 2007, CICO points (especially agents) have grown quite considerably. Agents growth has outpaced all other channels.
- MSC's work on [Agents count: The true size of agent networks in leading digital finance countries](#) shows that there are overlaps in the number of agents. The real number of agents in Kenya is around 190,000 (applying non-exclusivity and multiple till deflators).

### Mobile money agents and bank agents' growth (2007-19)

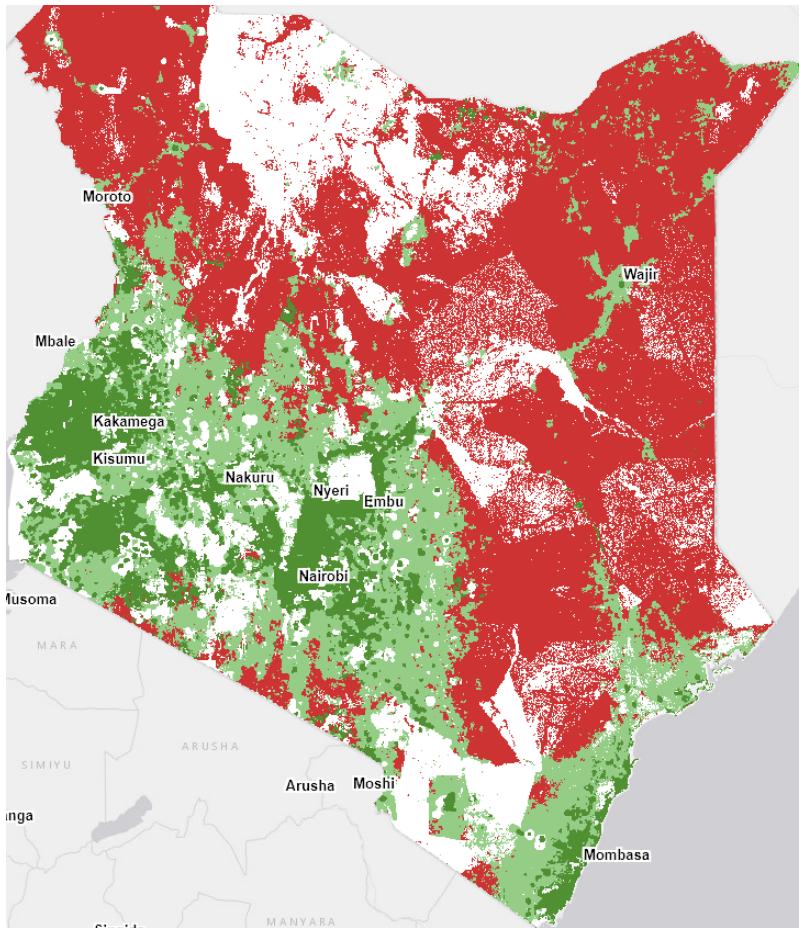


Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19



# CICO growth in Kenya is happening around the urban clusters, growth of CICO in rural and remote clusters is significantly slow

## Access to financial services points in Kenya



Source: BCG CICO Economics Research Kenya, 2019

Access based on probabilities of CICO access assigned to each distance band of <1km, 1-5km, >5km derived from [Fraym](#) CICO access layers and Intermedia 2017 Financial Inclusion Insights (FII) survey

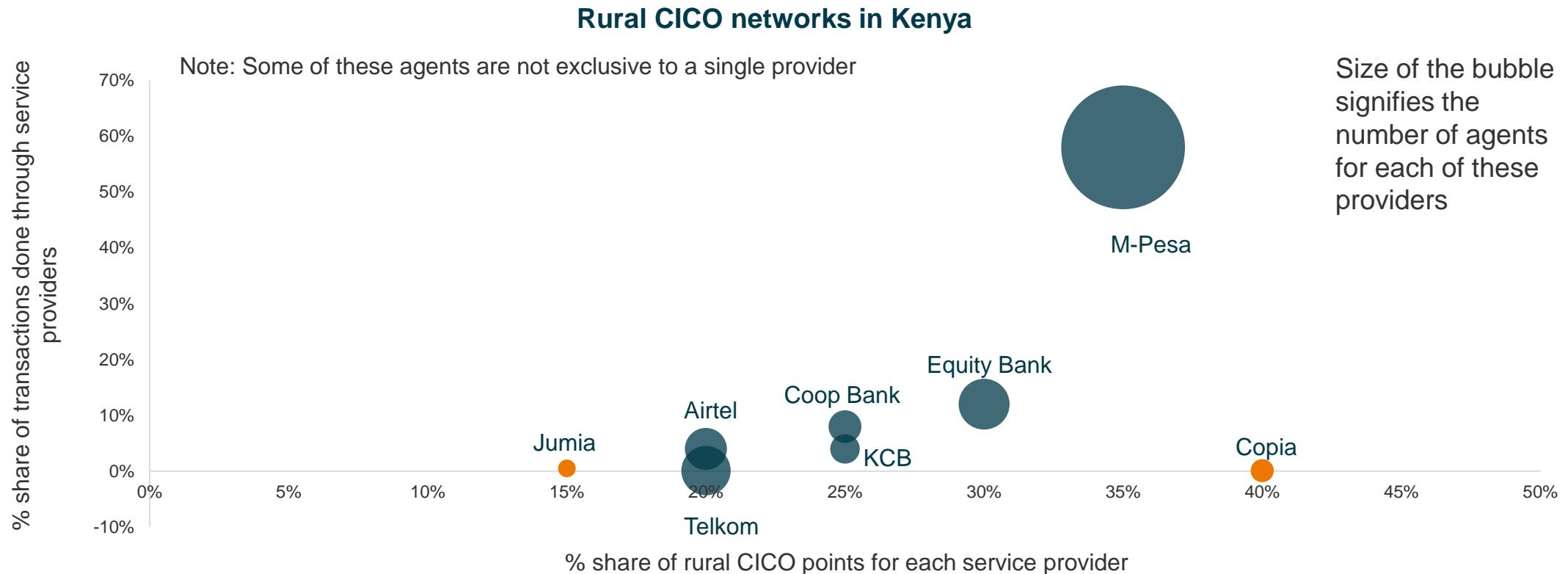
- CICO access
- <1 km
- 1-5 km
- >5 km

Zone	Excluded population	Covering land mass	Agents needed to provide 5km access
Urban	~0	~0	~0
Peri-urban/dense rural	~0	~1,800	~200
Rural Oasis	~0	~4,600	~100
Rural frontier	3 mil	~313,400	~15,500
<b>Total</b>	<b>3.5 mil</b>	<b>~319,800</b>	<b>~15,800</b>

- As per BCG, Kenya requires around 15,800 new agents, with vast majority (over 15,500) located in the large sparsely populated frontier.
- Agents need to be spread out in the north and western parts of Kenya that have extremely low number of agent outlets.
- The low numbers of agents in the north and western part are on account of: limited economic activity; lack of basic infrastructure; and climatic and demographic nuances.



31% of agents are in rural areas, CICO has reached a point in Kenya where all underserved locations are now operationally or economically unviable



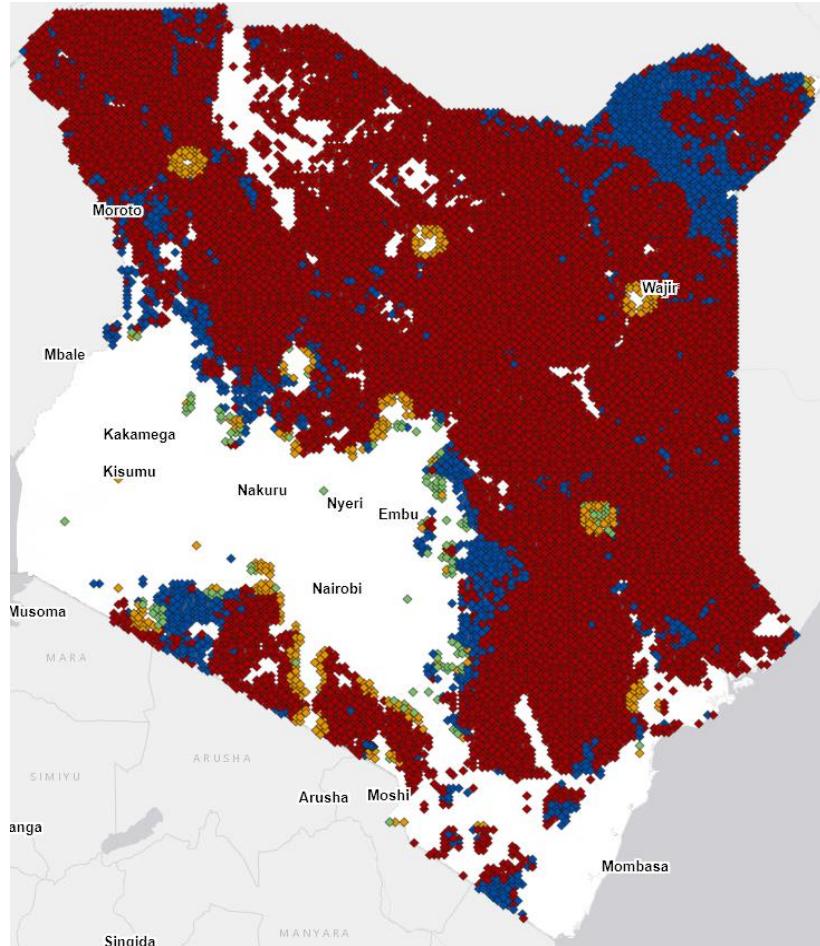
- Our analysis shows that **only about 31% of agents are in rural areas**.
- Further, our analysis shows that the agent activity in rural areas are focused around: highways; tourist attractions and international borders; and centers of economic activities, such as markets and refugee camps.

Refer to [Appendix 2 for maps of major providers of CICO services in Kenya](#)



# CICO has reached a point in Kenya where all underserved locations are now operationally or economically unviable

## Expected viability of new agents



Source: BCG CICO Economics Research Kenya, 2019

- Unviable, both economically and operationally
- Economically unviable, operationally viable
- Economically viable, operationally unviable
- Viable, both economically and operationally
- No classification: excluded from analysis due to lack of population in source data

### Expected viability of new agent locations

- Economic viability:** sufficient latent demand in an agent's catchment area for a non-dedicated agent to achieve profitability and sustain the business over time. In Kenya, economic viability defined as minimum of 500 total population within 5km of an agent location, based on country-specific analysis of agent business economics, commission structure, and DFS penetration rates
- Operational viability:** sufficient physical infrastructure for agents to operate without significant risk to liquidity or service outages. Agent location within 20km of a bank branch defined as the binding operational constraint, given this is typically the weakest infrastructure statistic compared to other indicators (e.g. Mobile connectivity or access to roads)

- BCG's review identified the need for new agents including for large sparsely populated frontier. The review, however, notes that only about 1% of the new agents are likely to be both economically and operationally viable.
- There is a need for supply-side incentives for the economically unviable agents and infrastructure investments or business model innovations for operationally unviable agents.



# Since 2007, a number of services are available at CICO points

## Services used by respondents at agent point

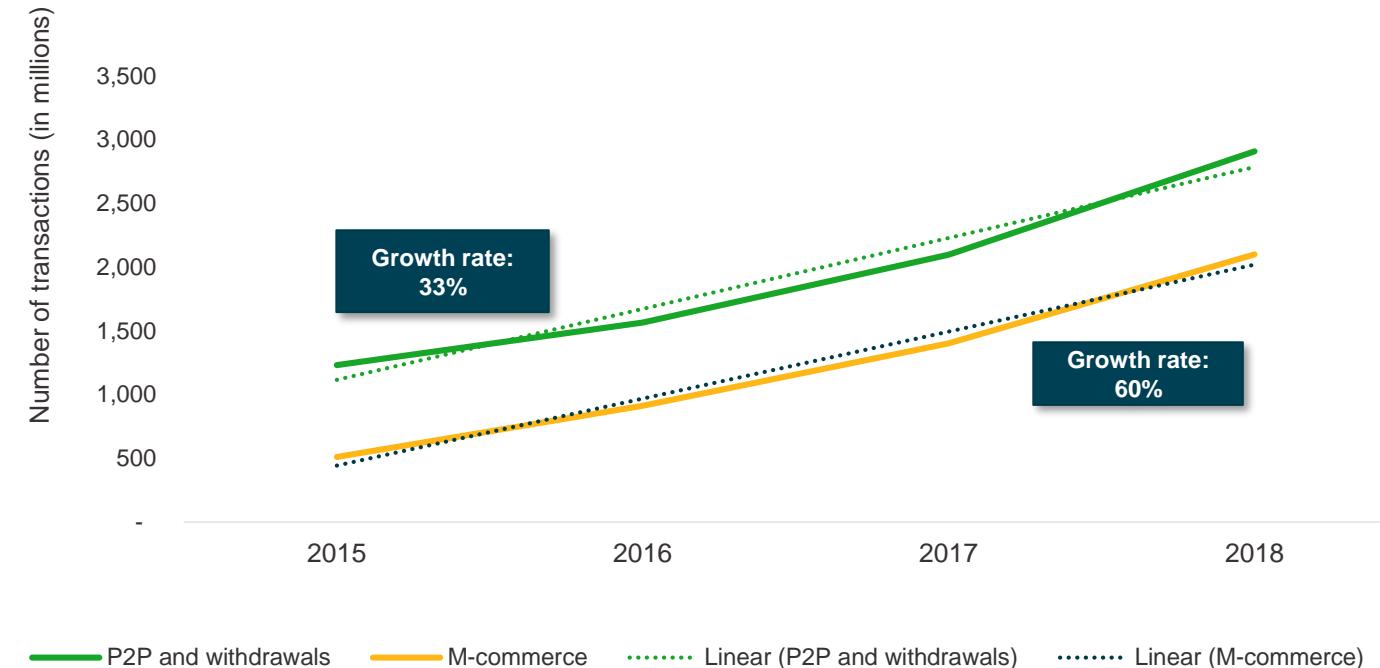
Services at agent's point	% of respondents using these services for mobile money at an agent point	% of respondents using these services for banks at an agent point
Cash-in	99%	99%
Cash-out	99%	99%
Account opening	62%	57%
Money transfer	5%	22%
Bill payments	8%	45%
Airtime top-up	32%	10%
Credit	1%	1%
Deposits to a bank account	0%	99%

Source: MSC Agent Network Accelerator, Kenya Wave 2 study, 2015

- Agents offer a number of services to the DFS users.
- The deposit to a bank account is indicative as mobile agents only take deposits into 'wallets' whose trust accounts are held by banks.

## Mobile money transactions

(by all mobile money providers in Kenya)



Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

While over the period, P2P and withdrawal counts at mobile money agents rose, the growth of P2P and withdrawal is significantly lower than that of M-commerce services.

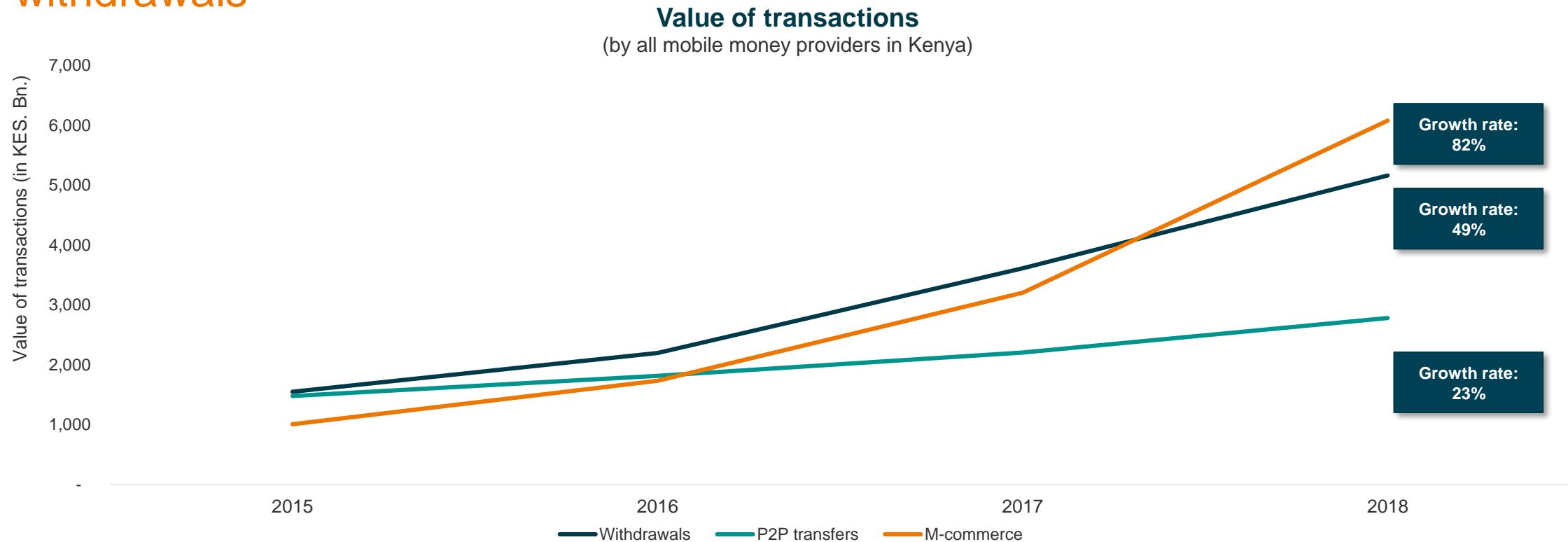
### Definitions

- P2P transfers:** Local remittances from one person to another.
- M-commerce:** Transactions for purchase and sales of goods and services through use of mobile money. Includes: C2B, B2C, B2B, C2G, G2C
- Withdrawals:** Mobile money to physical cash withdrawal at agent or ATM

Refer to [Appendix 3 for details on volumes and value of mobile money transactions for each of the mobile money providers in Kenya](#) (2015-18)



# Value of M-commerce is growing much more rapidly than P2P transactions and withdrawals



Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

Over the period, by value, m-commerce rose significantly higher than that of P2P transfers rose and withdrawals. This indicates more circulation of digital money within the digital ecosystem.

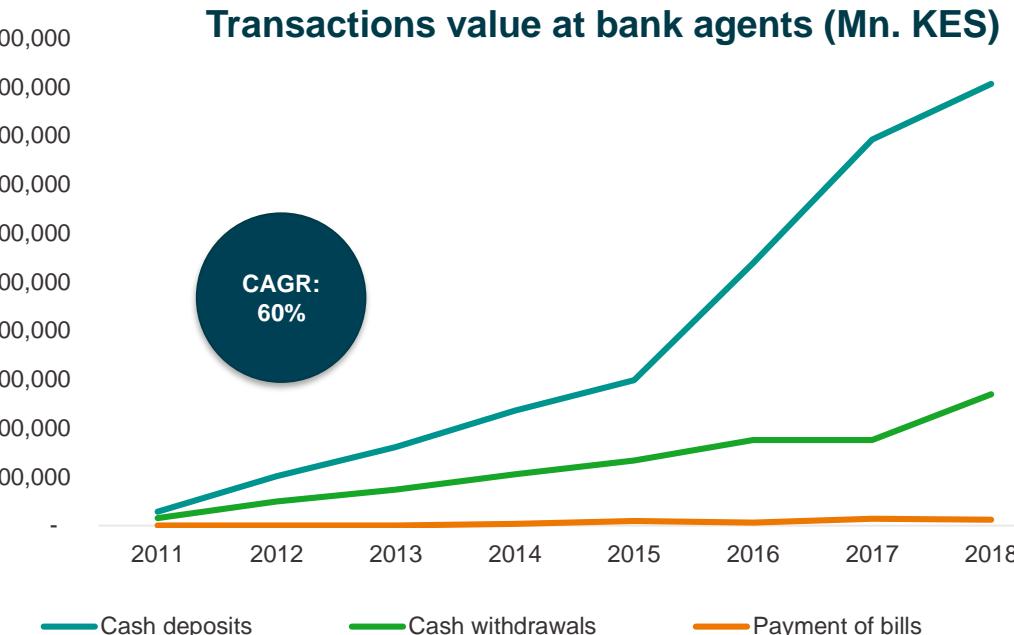
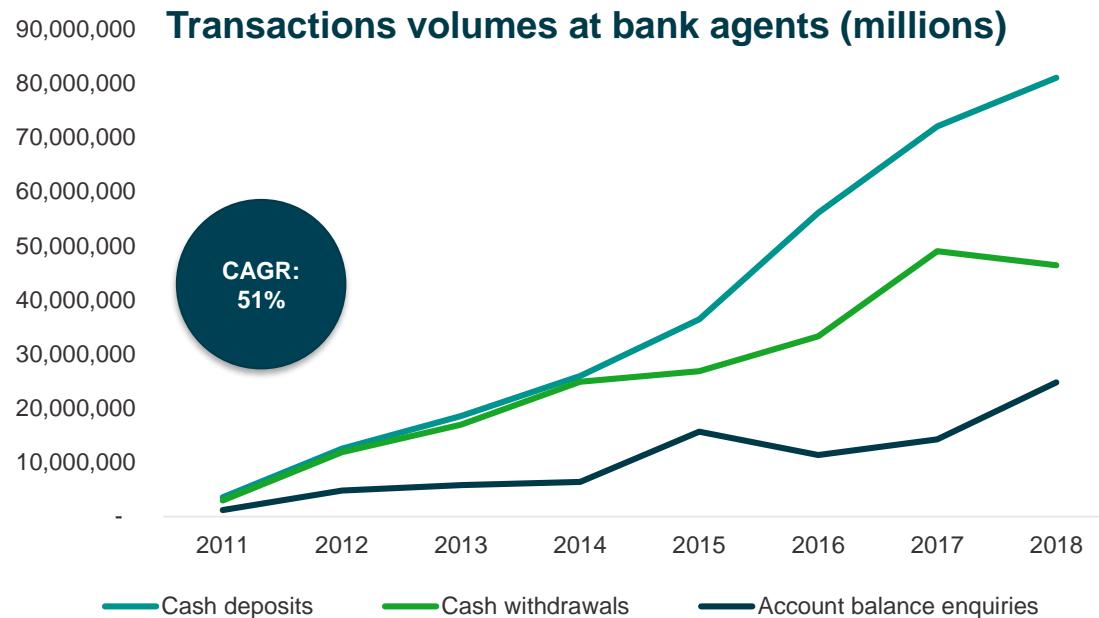
#### Definitions

- **P2P transfers:** Local remittances from one person to another.
- **M-commerce:** Transactions for purchase and sales of goods and services through use of mobile money. Includes: C2B, B2C, B2B, C2G, G2C
- **Withdrawals:** Mobile money to physical cash withdrawal at agent or ATM

Refer to [Appendix 3 for details on volumes and value of mobile money transactions for each of the mobile money providers in Kenya](#) (2015-18)



At bank agents, most transactions are cash deposits and withdrawals.  
Deposits are higher than withdrawals in volume and value.



Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

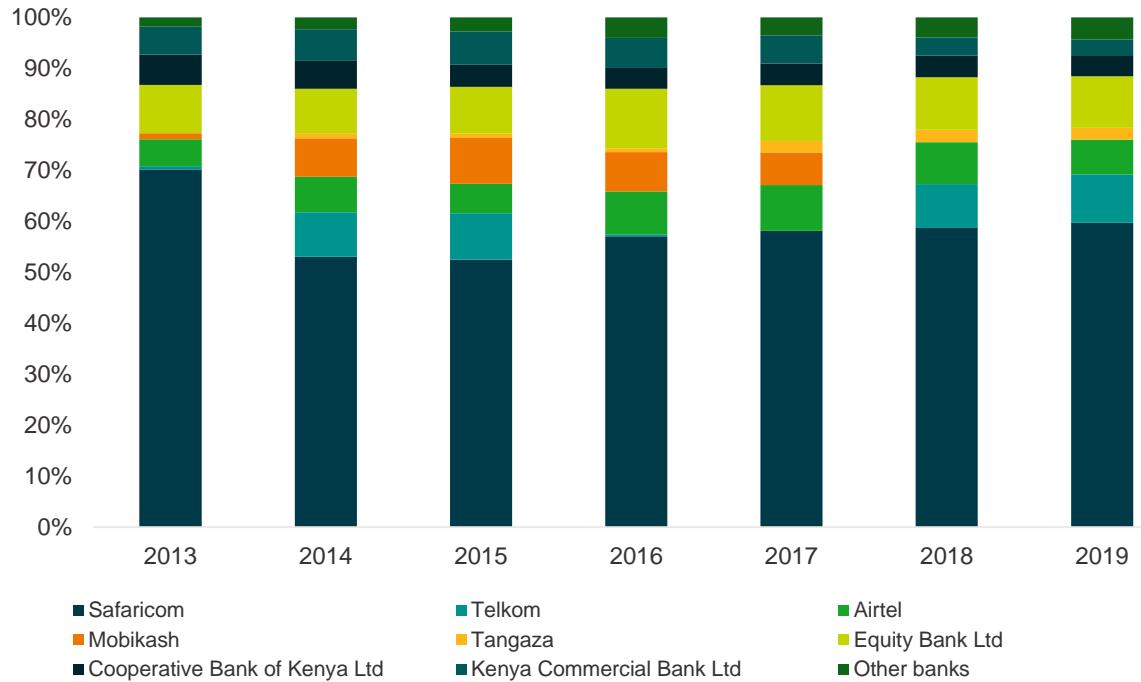
- It is worth noting that at the bank agents the volume of the deposits are almost double and value of deposits are almost three times that of the withdrawals. This is on account of the fact that most businesses and individuals use bank agents to deposit the proceeds of their business using the banking agents.
- Banking agents are peculiarly different from the mobile money agent. Most bank agents are non-dedicated, have higher float limits than mobile money agents, and are mostly float positive compared to the float negative mobile money agents.

Note: Cash-in and bill payment transactions for banks are significantly OTC meaning, a lower barrier to entry for customers. The customers do not necessarily require ID to pay bills, thus less KYC, and almost 'no AML'. For details on the point-of-sales device and cards growth in Kenya, refer to [Appendix 4](#).



# M-Pesa remains in the dominant position in terms of customer base and agent networks

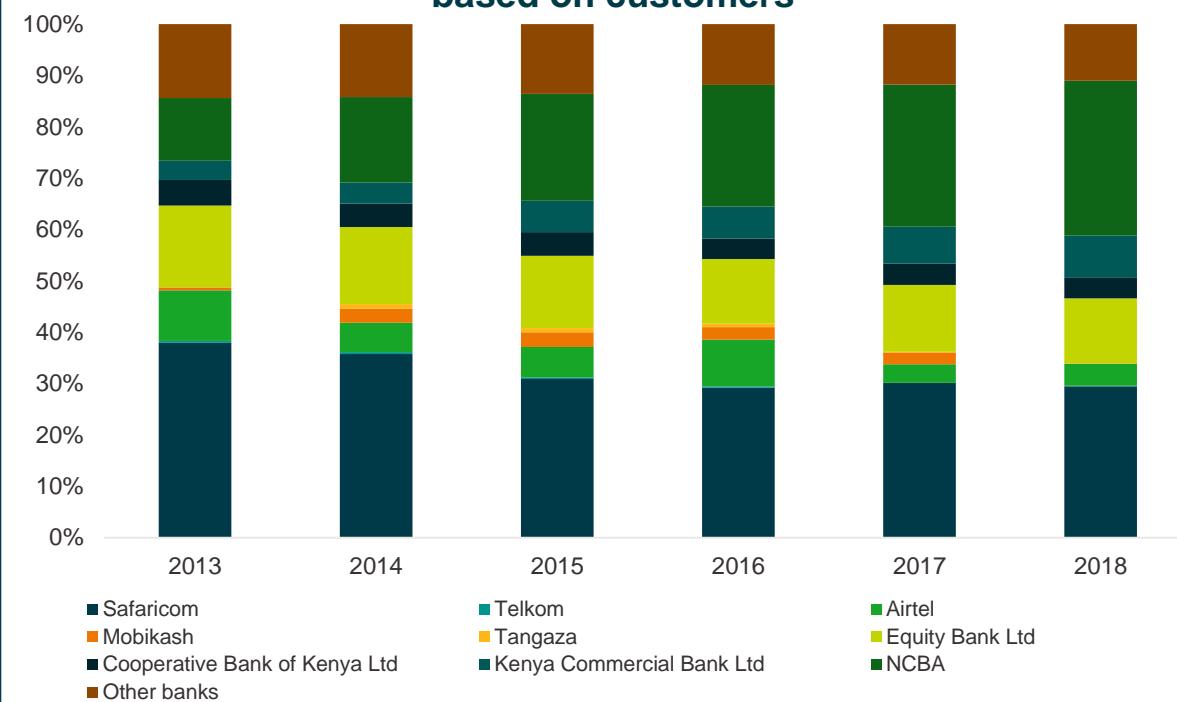
**Agents' share for mobile money and agency banking**



Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

- Safaricom faced some competition between 2014-17 from players such as Telkom and Airtel. With the consolidation of market (merger of Telkom and Airtel), Safaricom has further managed to increase the share of subscribers and agents for M-Pesa.
- Equity, Coop, and KCB share 85% of the bank agents.

**Banks and mobile money providers' market share based on customers**



Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

- Kenya is a multi-banked country hence there are users with multiple accounts with several providers. The duplication has not been factored.
- Equity Bank had over 15% market share from 2007 to 2012. In 2012, NCBA (then CBA) emerged on the scene with M-Shwari<sup>#</sup> (mobile savings and lending product) and gradually managed to garner over 30% market share for customers in 2018.

# Note: M-Shwari accounts could be used via M-Pesa only



# Kenya saw a perfect storm for digital financial services with conducive environment, dominant player, and innovative use cases evolution (1/2)

## Driver 1 Conducive country context and environment

- Test and learn approach of policy makers and regulators.
- Unmet financial services needs, favorable market conditions.
- An unintended factor for the growth of mobile money, especially, M-Pesa was the need for people to send money upcountry and within cities and towns during the post election violence. In the post election period, other means of sending money, such as through bus drivers or conductors failed, leading people to resort to mobile money.

## Driver 2 Anchor use case, evolution of use cases and focus on partnerships along the journey

- The first use case was send money home for M-Pesa.
- There after a number of use cases have been developed for the users including: get, spend, save, borrow, protect, and invest – including social cause products like short-term paybill.
- From 2008, Safaricom began partnering with FMCGs, banks, remittance providers, FinTechs (with APIs), some of whom were competitors, to increase their distribution network and reap mutual benefit.



# Kenya saw a perfect storm for digital financial services with conducive environment, dominant player, and innovative use cases evolution (1/2)

## Driver 3 Limited focus of existing financial service providers on the low- and moderate-income markets

- The financial institutions prior to emergence of M-Pesa did not actually focus on the needs of the low- and moderate-income markets.
- Microfinance and informal finance mechanisms were not very effective.
- Through CSR successful DFS providers have endeared themselves to the communities they serve with initiatives that have bolstered social and economic wellbeing e.g. Safaricom Foundation (and M-Pesa Foundation) and Equity (Wings to Fly).

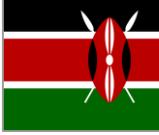
## Driver 4 Lack of competition resulting in oligopolistic market and dominant players

- Since 2007, Safaricom has not had faced any serious competition from the players in the market. All other players operated from the fringe and followed Safaricom.
- Safaricom competed on enhancing its presence, evolving the product range, and meeting needs of the low- and moderate-income clients.



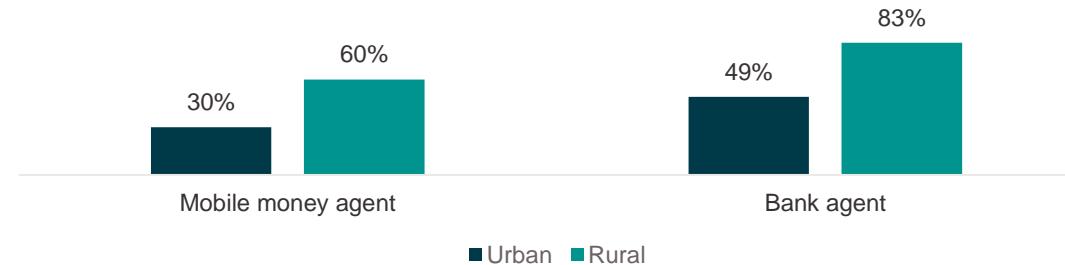
Photo: Flore de Preneuf / World Bank

## Country specific findings and analysis: PRACTICES

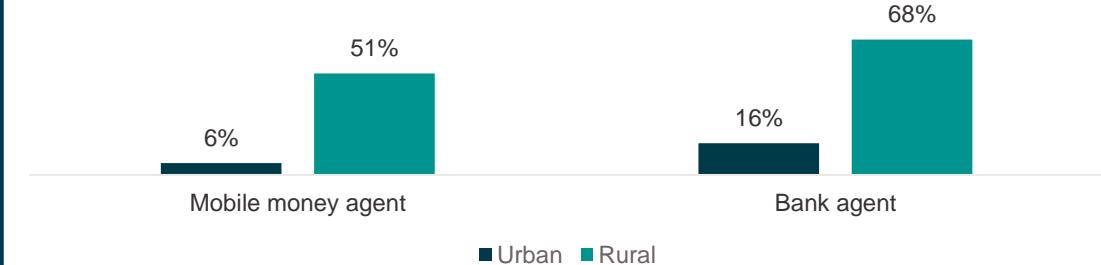


Distance of agents and time taken to reach an agent impacts use of agents in rural areas. More users in the rural areas require agent assistance and are often overcharged

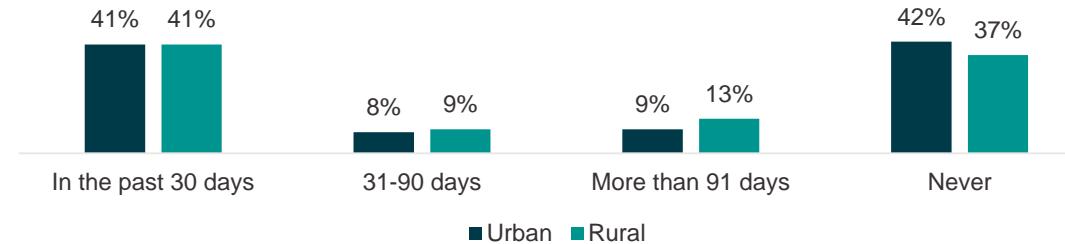
Distance of agent from customer's residence  
(more than 0.5 kilometers)



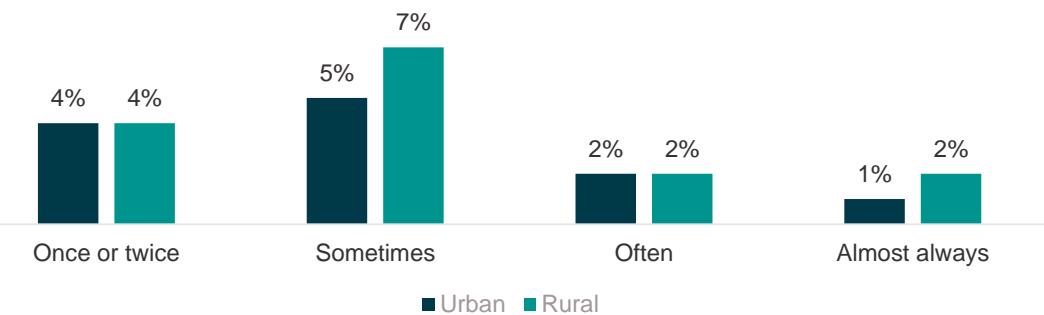
Time taken to reach an agent from customer's residence (more than 30 minutes)



Customers' needed agent assistance to carry out the transactions



Agent overcharged



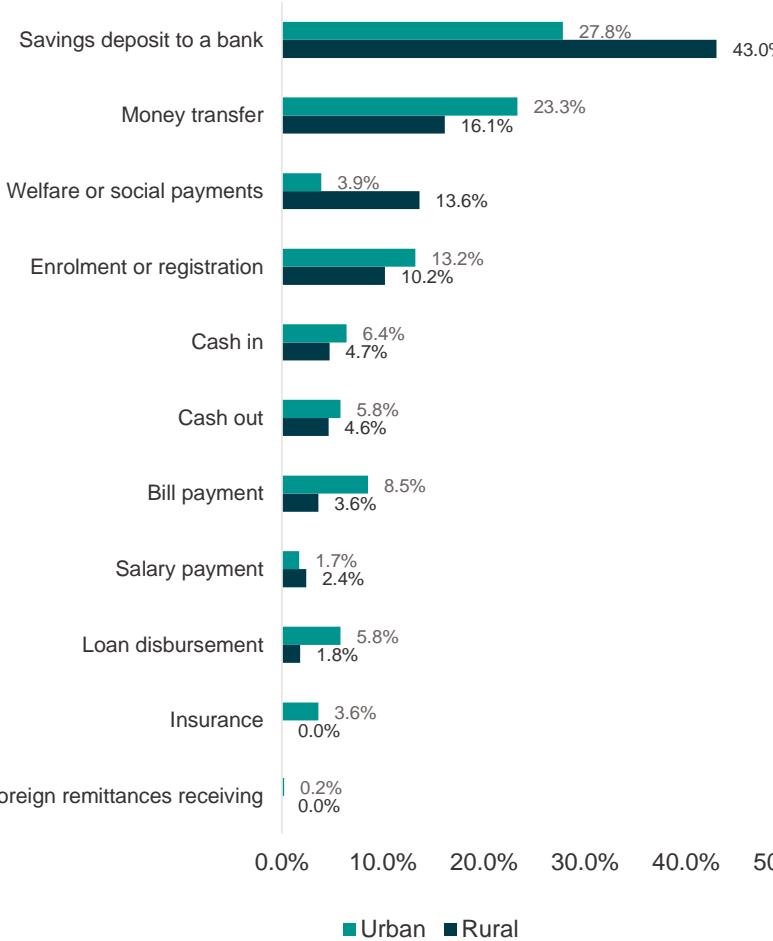
Source: Financial Inclusion Insights Tracking Survey, Mobile Money FSP Multi-Country Study, Kenya, 2017 – Wave 5

Rural agents are located farther from users' homes compared to their urban counterparts. Users in the rural areas take longer to reach the agents. Float or cash availability is a challenge to use digital financial services in rural areas. Rural users receive better customer service from agents, however, more of the users from rural areas need agent assistance to complete transactions and are often overcharged.



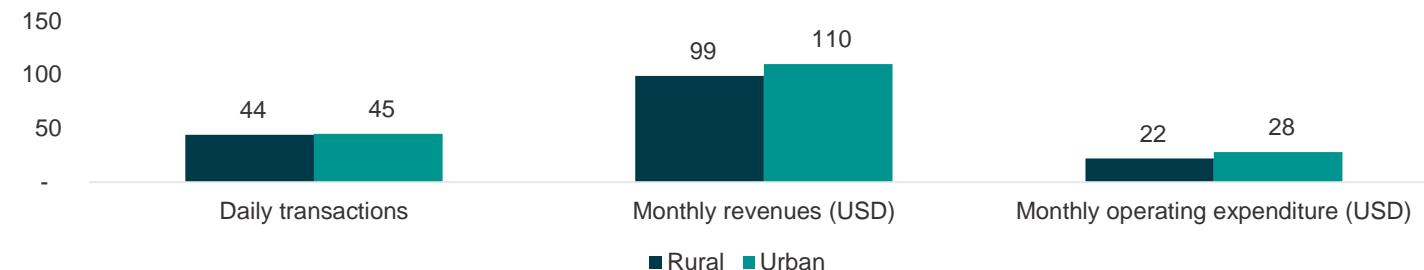
Rural and urban agents have comparable profits, but rural agents struggle with liquidity management and are not adequately trained and supervised

### Services provided by agents

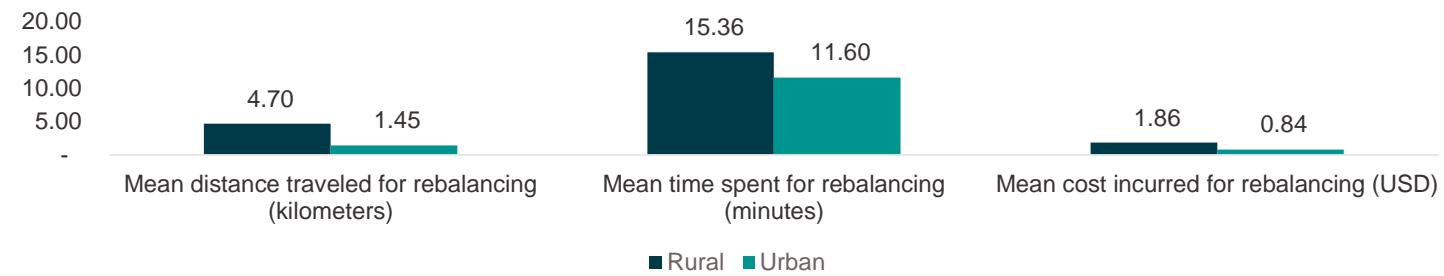


Source: MSC's Agent Network Accelerator study 2015,

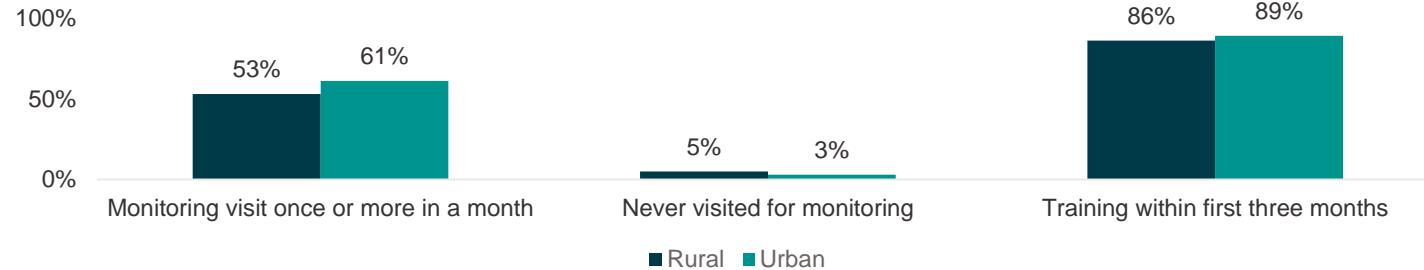
### Transactions and financials



### Liquidity management



### Monitoring and training





# Agents in Kenya struggle with liquidity management. In rural areas, limited agent training, monitoring, and supervision by the providers is a challenge

## 1. Liquidity management

### Challenges in reaching the last mile

- Several liquidity runs required to rebalancing points.
- Lack of sufficient number of rebalancing points in close proximity.
- Lack of agent level interoperability that results in separate float requirements for each provider.

## 2. Agent recruitment

### Challenges in reaching the last mile

- Several trips required to recruit an agent in rural areas – for form filling, branding, training etc.
- Lack of contextual knowledge of the recruiting teams.
- Lack of awareness amongst business persons in rural areas of the benefits of becoming an agent.
- Poor agent and customer value proposition in rural areas.

## 3. Training, monitoring, and supervision of agents

### Challenges in reaching the last mile

- Distance from the town and city centers.
- Training focus on transaction processing with limited focus on selling.
- Cost implication for the provider.

For more details on CICO network's current practices and challenges to expand to rural areas, refer to [Appendix 6 Practices and challenges to expand in rural areas for agent networks in Kenya](#)

# Liquidity practices and challenges for agent networks models in Kenya



## Practices

### Costs and time taken to rebalance

- Several liquidity runs required to rebalancing points.
- Agents primarily use banks to rebalance. Super agents are mostly banks that help with only float rebalancing. They charge agents 0.1% of rebalancing amount.
- 95% agents take 30 minutes or less to reach a bank for rebalancing.
- Rebalancing may cost on an average up to 0.5% of agents' monthly revenues.

### Float levels of agents

- Mobile money agents have lower float compared to the bank agents.
- Mobile money agents process more withdrawals than deposits hence are usually float negative. On the other hand, bank agents process more deposits and hence are usually float positive.
- Demand for e-float is higher in both urban and rural areas – although it is easier to rebalance in urban areas due to ease of access to rebalancing facilities.
- As there are more non-dedicated agents in rural areas, they usually dip into the cash generated by the parallel business when needed.
- Some providers prescribe agents' float limits at the agent onboarding stage, however, agents may borrow the funds initially to satisfy the setup requirement and subsequently may not sustain the required liquidity balances.

### Liquidity management support by providers

- Banks, such as KCB and Equity Bank in Kenya provide credit facilities for their agents, more mobile operators have been implementing overdraft facilities (in some cases with digital credit providers like Jumo) to bridge the gap between agent rebalancing trips. Usually, agent performance is the key qualifying factor for this credit.

## Challenges

- Current policy limits the options to provide liquidity management assistance through agent banking – a financial institution is unable to transport cash directly without an armored vehicle, which prevents liquidity delivery to agent locations. Only 2% agents get liquidity delivered to their outlet.
- Lack of sufficient number of rebalancing points in close proximity.
- Lack of agent-level interoperability that results in separate float requirements for each provider.



Safaricom is the dominant player in mobile money and digital financial services in Kenya. Equity and KCB are large banks with most dominant agency banking network in Kenya

Existing players			
Attributes	Safaricom	Equity Bank	KCB
<b>Profile</b>	<ul style="list-style-type: none"><li>• Enjoys over 80% mobile money subscriber market share</li><li>• Dominant since 2007</li><li>• Serves over 25 million mobile money users</li></ul>	<ul style="list-style-type: none"><li>• Enjoys over 20% bank account market share</li><li>• Innovations and digital-oriented bank</li><li>• Serves over 11 million customers</li></ul>	<ul style="list-style-type: none"><li>• Enjoys over 10% bank account market share</li><li>• Largest branch network</li><li>• Serves over 7 million customers</li></ul>
<b>Reasons for dominance</b>	<ul style="list-style-type: none"><li>• Lack of competition</li><li>• Investments in network and infrastructure</li><li>• Branding and marketing</li><li>• Customer centricity in user experience</li></ul>	<ul style="list-style-type: none"><li>• Mass market focus</li><li>• Product and services evolution</li><li>• Outreach and spread</li><li>• High visibility</li><li>• Focus on social payments</li></ul>	<ul style="list-style-type: none"><li>• Partnerships with Safaricom (KCB M-Pesa)</li><li>• Facilitating government payments (at e-citizen centers)</li><li>• Branch networks</li></ul>
<b>Challenges to reach the last mile</b>	<ul style="list-style-type: none"><li>• Network spread</li><li>• Population density</li><li>• Inadequate operational capital for agents</li><li>• Liquidity management</li><li>• Infrastructure as well as building a viable business case</li><li>• Branch network and outreach in the rural areas</li><li>• Profitability of agent operations in rural areas</li></ul>		

For more details on existing players and ecosystem stakeholders business models, refer to [Appendix 7 Business models of providers, aggregators, and agents in Kenya](#)



# Digifarm, Copia, Jumia, and M-Kopa are emerging players that have the potential to catalyze CICO networks in rural areas

Potential players				
Attributes	Digifarm	Copia	Jumia	M-Kopa
<b>Profile</b>	<ul style="list-style-type: none"><li>An application that aims to find sustainable solutions for smallholder farmers offering inputs, learning content, loans, online marketplace</li></ul>	<ul style="list-style-type: none"><li>A distribution model for physical goods ordered online and delivered in rural areas. Half a million customers. 6,000 agents</li></ul>	<ul style="list-style-type: none"><li>Online platform for e-commerce. Has a network of sales and service agents – J-Force. Over 3,000 agents, primarily in urban areas.</li></ul>	<ul style="list-style-type: none"><li>Pay-as-you-go solar and other solutions. Diversified to lending based on use and repayment of solar home based solutions. Serves over 500,000 homes</li></ul>
<b>Potential to bring better reach and quality in CICO networks if scaled</b>	<ul style="list-style-type: none"><li>Integrated, free-to-use mobile platform. Works with agriculture depots which may become CICO points</li><li>Over 2 million farmers registered</li></ul>	<ul style="list-style-type: none"><li>Focus on rural areas, physical distribution model</li><li>Agents have the potential to expand to delivering financial services</li></ul>	<ul style="list-style-type: none"><li>Easier, online onboarding</li><li>Leverages the youth dividend</li></ul>	<ul style="list-style-type: none"><li>Mass market focus</li><li>Complement Safaricom agent networks</li><li>Rural focus</li></ul>
<b>Challenges to achieving scale</b>	<ul style="list-style-type: none"><li>Trust and confidence</li><li>Agent-level training and support</li><li>Liquidity management</li><li>Focus on rural dense only</li><li>Training agents to become CICO outlets</li><li>Focus on urban and peri-urban areas only</li><li>Focus on solar solutions</li></ul>			

For more details on existing players and ecosystem stakeholders business models, refer to [Appendix 7 Business models of providers, aggregators, and agents in Kenya](#)



# Digital products and services in Kenya meet different use cases such as get, send, spend, borrow, save, invest, and protect

Product or service for the last mile	Examples	Impact	Success factors
Person-to-person transfers	<ul style="list-style-type: none"><li>M-Pesa (Safaricom)</li><li>Airtel Money (Airtel)</li><li>Others</li></ul>	<ul style="list-style-type: none"><li>In 2019, KES 665 billion was transacted using P2P</li><li>Almost all of the 32 million subscribers use P2P services</li></ul>	<ul style="list-style-type: none"><li>Reliable service</li><li>Network effect</li><li>Domestic remittance needs</li></ul>
Merchant payments and pay for goods and services	<ul style="list-style-type: none"><li>Lipa na M-pesa</li><li>Eazzy Pay by Equity Bank</li></ul>	<ul style="list-style-type: none"><li>In 2019, 425 million transactions worth KES 1,625 billion conducted</li></ul>	<ul style="list-style-type: none"><li>Merchant network spread</li><li>Value proposition to the merchants and users</li></ul>
Digital credit and digital overdraft	<ul style="list-style-type: none"><li>M-Shwari and Fuliza (Safaricom and NCBA)</li><li>KCB M-Pesa (Safaricom and KCB)</li><li>Eazzy Loans (Equity Bank)</li><li>Others</li></ul>	<ul style="list-style-type: none"><li>Over 50 providers, serving over 35 million users</li><li>M-Shwari had disbursed USD 4.5 billion to 32 million customers since 2012</li><li>Since launch in January 2019, Fuliza over KES 150 billion advanced</li></ul>	<ul style="list-style-type: none"><li>Quick and easy access</li><li>Loan limit increases over cycles</li><li>Word of mouth publicity</li></ul>
Save and Invest	<ul style="list-style-type: none"><li>Mali and M-Akiba (Safaricom)</li></ul>	<ul style="list-style-type: none"><li>75% subscription amounting to KES 187 million; 513,000 M-Akiba accounts</li></ul>	<ul style="list-style-type: none"><li>Secured investment backed by government securities</li><li>Good rate of return</li><li>Ease of transactions through mobile phones</li></ul>
Insurance	<ul style="list-style-type: none"><li>M-Tiba (Safaricom)</li><li>Riziki Cover (Equitel and Britam)</li></ul>	<ul style="list-style-type: none"><li>M-Tiba has partnered with NHIF; over 60 clinics and 2,000 healthcare providers signed up; and over 45,000 registered users</li><li>Riziki cover has 200,000 customers under the freemium product and 15,000 customers under the premium paying category</li></ul>	<ul style="list-style-type: none"><li>Pricing of the products</li><li>Health care provider network covered</li><li>Ease of purchase of products</li></ul>
Fund-raising, saving, credit from savings groups	<ul style="list-style-type: none"><li>Chama</li><li>Short -term Paybill</li></ul>	<ul style="list-style-type: none"><li>Kenyans for Kenya campaign in 2011 over KES 500 million for famine relief from ordinary Kenyans</li></ul>	<ul style="list-style-type: none"><li>Network effect</li></ul>

For more details, refer to [Appendix 8 Evolution of product, services, and technology](#)



# Safaricom's strategic partnerships to offer use cases to meet the financial services needs of low- and moderate-income users

Partners	Product offered	Strategic complementarity
Safaricom, an MNO, and NCBA, a bank	M-Shwari, a digital credit and savings product	<ul style="list-style-type: none"><li>• Distribution network and subscriber base of Safaricom</li><li>• Brand name of both</li><li>• Banking license of NCBA</li></ul>
Safaricom, an MNO, and other service providers such as iProcure, FarmDrive	Digifarm, an emerging model to catalyze access to and usage of finance for smallholder farmers	<ul style="list-style-type: none"><li>• The integrated nature of the platform and its intensive use of digital data seeks to leverage each partner's strengths, reduce risk for each partner, and drive higher revenues across the partnership</li></ul>
Safaricom, an MNO, and Equity Bank (previously Atlas Mara)	Bloom, an instant 1-week or 1-month loans for Lipa Na M-Pesa merchants offered by Equity Bank	<ul style="list-style-type: none"><li>• Rides on the existing merchant base of Safaricom</li><li>• Relatively risk free proposition for the bank as the product leverages data on merchants' business volumes</li></ul>

For more details, refer to [Appendix 9 Partnership examples](#)



## Other players' strategic partnerships to offer use cases to meet the financial services needs of low- and moderate-income users

Partners	Product offered	Strategic complementarity
Finserve Africa, a subsidiary of Equity Bank, and Airtel, an MNO	Equitel, an MVNO riding on Airtel's infrastructure	<ul style="list-style-type: none"><li>• Rides on the existing and robust customer base of Equity Bank and deepens the bank's offering to its customers</li><li>• Increased utility and capacity of existing infrastructure of Airtel</li></ul>
Equity Bank and Government of Kenya	Hunger Safety Net Program (HSNP) aimed at reducing poverty, food insecurity and malnutrition	<ul style="list-style-type: none"><li>• An expansion of agency banking access points in remote villages in Northern Kenya resulted in broadened choice for customers and program penetration</li></ul>
NCBA, Cooperative Bank, KCB, and Diamond Trust Bank	Stawi, a solution designed for all entrepreneurs to improve access to credit	<ul style="list-style-type: none"><li>• Market place approach to financial services for the entrepreneurs</li><li>• Use of common platform to increase outreach</li></ul>

For more details, refer to [Appendix 9 Partnership examples](#)

# Potential strategic partnerships to promote uptake and usage in rural areas



Partners	Product offered	Strategic complementarity	Potential Blockers	Suggested Actions
Safaricom and Copia	Financial services at agents point	<ul style="list-style-type: none"> <li>Rural agent networks of Copia may be leveraged by Safaricom to extend reach to rural and remote places</li> <li>Combined revenue earning potential will significantly extend the reach of the agents</li> </ul>	Delivery infrastructure required by Copia is expensive and requires iterative deployment, reducing the immediate realizable benefits	<ul style="list-style-type: none"> <li>Copia already uses M-Pesa for payments. Immediate next step would be define the “ideal” Copia agent requirement and have Safaricom share the list of potential agents.</li> <li>Loans linked to consumer goods can be provided for repeat clients.</li> </ul>
Huduma centre and CICO agents in rural areas	Offer e-citizen and e-governance services	<ul style="list-style-type: none"> <li>E-commerce or government services can bring additional revenue for CICO agents in the rural areas.</li> <li>There are many people who lack digital fluency for e-governance services hence would like to use agents to help them receive these services</li> </ul>	High costs required for the training and then ongoing quality monitoring of the agent networks	<ul style="list-style-type: none"> <li>Define service list that can be provided</li> <li>Define the platform that will be used</li> <li>Agree on revenue model for the potential services.</li> </ul>

# Potential strategic partnerships to promote uptake and usage in rural areas



Partners	Product offered	Strategic complementarity	Potential Blockers	Suggested Actions
Tier 3, 4, 5 banks, SACCOs, MFBs, and credit only MFIs	Shared agent services	<ul style="list-style-type: none"> <li>Provide CICO solutions to their own customers and others.</li> <li>Reduce duplication of efforts and costs.</li> <li>Smaller FSPs can benefit from bigger banks leasing to them their technology through a banking-as-a-service model</li> </ul>	It will require regulatory changes as SACCOs and credit-only MFIs are not allowed to offer agency banking.	<ul style="list-style-type: none"> <li>Amend agency banking regulations to tacitly include SACCO's</li> </ul>
E-commerce and agents in the rural areas	Offer e/m-commerce to people in rural areas	<ul style="list-style-type: none"> <li>Agents can earn additional revenue by becoming distribution points and focus on physical products distribution together with the e-commerce providers</li> </ul>	Delivery infrastructure required by ecommerce companies is expensive and requires iterative deployment, reducing the immediate realizable benefits	<ul style="list-style-type: none"> <li>Immediate next step would be defining the "ideal" agent requirement</li> <li>Loans linked to consumer goods can be provided for repeat clients.</li> </ul>



## Country specific findings and analysis: POLICY



# Government of Kenya is focused on building a robust digital economy and proactive steps to improve data protection and customer protection

Key policies	Highlights
The Vision 2030 (2008)	<ul style="list-style-type: none"><li>Second Medium Term Plan 2013-2017 included a limited number of high-level financial inclusion-related targets.</li></ul>
Digitization of cash transfer programmes (2010)	<ul style="list-style-type: none"><li>Over 600,000 people supported via digital payments. Higher efficacy of payments.</li><li>Digital capability of beneficiaries is an issue which is not adequately addressed.</li></ul>
National Payment Systems Act (2011)	<ul style="list-style-type: none"><li>A framework for digital financial services and payment service providers in the country.</li></ul>
Customer protection policy (2012)	<ul style="list-style-type: none"><li>Consumers' rights and obligations vis-a-vis product and service liability; they make provisions for the promotion and enforcement of consumer rights as well as empower consumers to seek redress for infringement of their rights as consumers; and also provide for compensation.</li></ul>
Interoperability of payment service providers (2017)	<ul style="list-style-type: none"><li>Wallet to wallet interoperability amongst MNOs. Bank interoperability through Pesalink and bilateral connections.</li><li>Agent-level interoperability not yet enforced. Thus agents maintain and manage several floats and devices.</li></ul>
Gender policy (2019)	<ul style="list-style-type: none"><li>Collection and analysis of data and information required for the design, monitoring and evaluation of policies and projects for women.</li><li>Not directly aligned to digital financial inclusion of women in Kenya.</li></ul>
Digital economy blueprint (2019)	<ul style="list-style-type: none"><li>Development of ecosystem platforms. E-commerce and single digital market. P2G use cases digitized. Enhanced interoperability.</li></ul>
Cyber security policy (2019)	<ul style="list-style-type: none"><li>Prohibits the sharing of false, misleading, or fictitious data. Mitigate risks of cyber crimes and frauds.</li></ul>
Data protection and privacy policy (2019)	<ul style="list-style-type: none"><li>Changes data localization, data security aspects, and the lawful basis for data processing and data sharing in Kenya.</li><li>Current ambiguities in regulation impact quality of service, fair prices, and consumer protection standards.</li></ul>
Digital Finance 2.0 for National Treasury (2020)	<ul style="list-style-type: none"><li>DF 2.0 for National Treasury on lines of India Stack to cover: ID, Universal agents, company identity and credentials, interoperability, and G2P/P2G.</li></ul>



# Digitizing government-to-persons (G2P) payments is an opportunity to catalyze digital financial services in rural areas

**Kenya has a social protection policy that focuses on protecting individuals and households from the impact of adverse shocks to their consumption. Social protection programs in Kenya include:**

Attributes	Details
Focus	<p>Key social protection actions in the areas of:</p> <ul style="list-style-type: none"><li>• Social assistance e.g. orphans and maternal benefits</li><li>• Social security e.g. pensions, workers compensation</li><li>• Health insurance e.g. access to health services</li></ul>
Structure	<p>Government social protection schemes organized under Kenya National Safety Net Programme (NSNP):</p> <ul style="list-style-type: none"><li>• The Hunger Safety Net Cash Transfer(HSNP)</li><li>• Cash Transfer for Orphans and Vulnerable Children Cash(CT- OVC)</li><li>• Persons With Severe Disabilities Cash Transfer (PWSD-CT)</li><li>• Older Persons Cash Transfer(OPCT)</li><li>• World Food Programme-Cash For Assets (CFA)</li></ul>
Coverage	<ul style="list-style-type: none"><li>• 1.5 million households covered under all the schemes on a national and regional level of the total 9 million households</li></ul>

The Government has gradually focused on digitization of G2P payments, however, from the point of view of CICO, the core bottlenecks includes:

- Absence of a reliable CICO network impacts delivery and access to cash transfers or assistance.
- Over-reliance on static points of access to cash transfers is a hindrance based on the characteristics of the beneficiaries and the areas of operation of social protection programs.
- Incentives and exemptions - such as differentiated commission structures, use of solar powered devices etc. – are necessary to address unique operational challenges in CICO network in rural areas and to encourage agents and service providers.



# The government may focus on building potential public infrastructure that could augment rural CICO expansion

Proposed intervention	Strategic importance	Intended impact	Example from other countries
G2P and P2G using digital channels	<ul style="list-style-type: none"><li>Choice of digital channels for G2P recipients to receive funds into their accounts and to be able to access them reliably, at minimum cost, conveniently and receive good customer service.</li><li>Provide options for users to use digital channels to pay for all the government services including taxes, fees, duties, and levies.</li><li>Reliability, convenience, accessibility, choice, and efficacy.</li></ul>	<ul style="list-style-type: none"><li>Digital G2P and P2G distribution helps to meet the design objectives of reliability, minimal cost of access, convenience, and service quality and in maximizing choice levels for the beneficiaries and users. It helps governments reduce leakages and costs.</li><li>Government may support rural CICO agents through digital G2P programs, incentives to beneficiaries, agents, or providers.</li></ul>	<ul style="list-style-type: none"><li>Through the Pradhan Mantri Jan Dhan Yojana (PMJDY) accounts it became easier for India's benefit programs to disburse payments directly into recipient accounts and to lower provider commissions.</li></ul>
Agent-level interoperability with float sharing mechanisms	<ul style="list-style-type: none"><li>Due to lack of agent level interoperability, float is split and hence customer service denial is too common. Agent-level interoperability with float sharing frameworks will basically mean that agents have one stock of liquidity with which they can service anybody.</li><li>Liquidity and rebalancing issues at the agents.</li></ul>	<ul style="list-style-type: none"><li>More transactions, less service denials, and better utility of agent points as well higher profitability for agents, aggregators, and the providers.</li></ul>	<ul style="list-style-type: none"><li>Uganda has implemented a shared agent network that is shared by 14 banks and has seen a significant increase in agent activity.</li></ul>

For more details on how government may support rural CICO through digital G2P programs, incentives to beneficiaries, agents, or providers, refer to [Appendix 10 Government may support rural CICO through digital G2P programs, incentives to beneficiaries, agents, or providers](#)

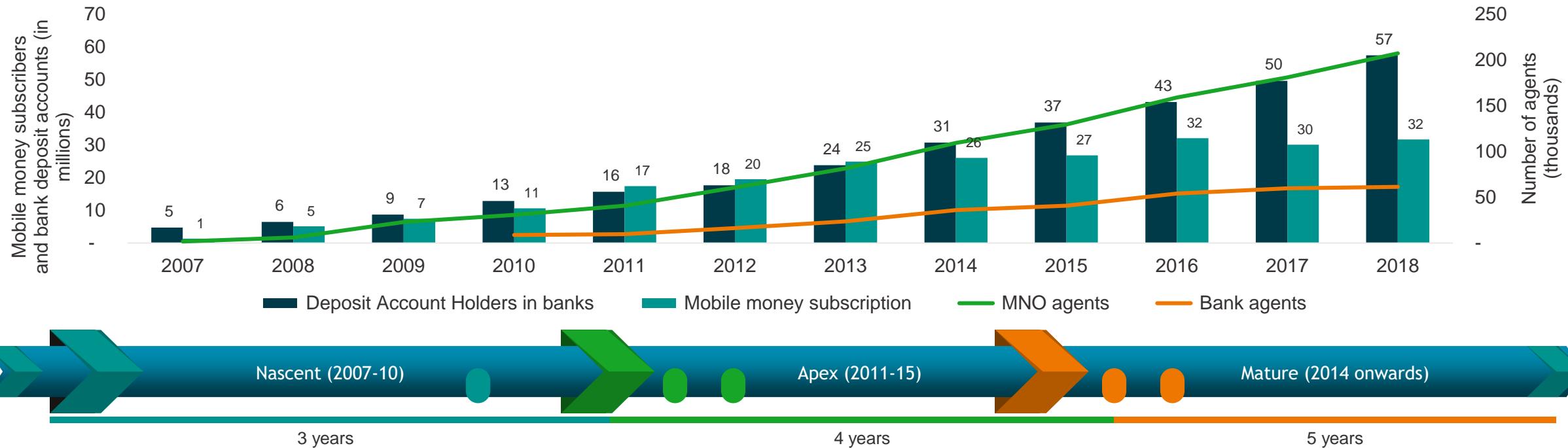


Photo by Francis Minien, CGAP Photo Contest

## Country specific findings and analysis: REGULATIONS

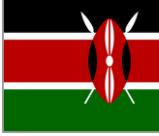


# Supportive and enabling policy environment and “test and learn” approach led to a flourishing digital financial sector in Kenya



Supportive and enabling policy environment, regulators’ “test and learn” approach, and embracing technological innovations led to a flourishing digital financial sector in Kenya. Initial support to mobile money systems led to development of products and services that accelerated financial inclusion and also became stepping stones for use of full service accounts for the Kenyan population. The regulators balanced the innovation with risks and systemic stability to support market dynamism and thus contribute to a catalytic growth in access and uptake.

For more details on, refer to [Appendix 11 Evolution of regulations](#)



# Catalytic growth in financial access in Kenya happened due to support of regulators to the digital finance industry

Key regulations/Policy	Impact	Measures
No-objection to M-Pesa (2007), float interest to be donated to a charity	Mobile money transfers in Kenya. Safaricom Foundation used float interest for CSR. Evolution of more use cases.	Allow businesses to accept and report M-Pesa as legal tender.
Guidelines on Agent Banking (2010), Prudential guidelines (2013), sub-contracting of agents and use of aggregators (amendment 2013)	Banks allowed in agency banking. Higher floats, float positive agents, more cash ins.	CBK ensuring compliance by FSPs through license issuance, monitoring and reporting.
The Consumer Protection Act, 2012, The Data Protection Act, 2019	Protection of customers' concerns.	Publicizing consumer rights, advocacy through Consumers Federation (COFEK)
NPS Regulations (2014)	Regulation of non-banks.	CBK ensuring compliance by FSPs via license issuance, monitoring and reporting.
Prohibition of agent exclusivity (2014)	Agents began to offer services for multiple providers. Rationalization of agent numbers.	Publicizing agent rights, advocacy through Competition Authority (CAK)
Competition Authority intervened to remove discriminatory USSD pricing (2014)	Providers are able to reach customers using affordable USSD channels. Some providers continued to charge the higher fees on USSD.	Publicizing consumer rights, advocacy through Competition Authority (CAK)
Interoperability (2017)	In May 2017, e-money providers agreed to interoperate. It became operational in late 2018.	Publicizing consumer rights and enforcing compliance through competition authority

For more details on, refer to [Appendix 11 Evolution of regulations](#)



# Kenya has robust regulatory frameworks for digital financial services that enable innovation while managing underlying risks

## 1 Non-bank participation

- Allowed,
- Payment systems and payment instruments in Kenya are primarily regulated under the [National Payment Systems Act, 2011](#).
- A payment system under the NPS Act is broad and covers virtually all forms of non-cash payments Pursuant to section 12(1) of the [National Payment Systems Act, 2011](#), a person who wishes to become a payment service provider in Kenya must first obtain authorization from the Central Bank of Kenya.



- Banks and payment service providers are allowed to have an agent network.

## 2 Use of agents

- Bank agents covered under the guidelines for agent banking under the Banking Act Cap 488 (the Banking Act) is regulated by the [Guidelines on Agent Banking CBK/PG/15](#) (the Agent Banking Guidelines).
- Mobile money agents are part of payment systems governed by the [National Payment Systems Act, 2011](#) and the [National Payment System Regulations, 2014](#).
- Exclusive contracts between a bank and/or non-bank with agents is a restricted trade practice under the [Competition Act, Cap 504](#).
- The [National Payment System Regulations, 2014](#) also mention no contract between agent and principal to be exclusive.



- The [National Payment System Regulations, 2014](#) provides criteria for an electronic retail payment service providers agent.
- The [Guidelines on Agent Banking CBK/PG/15](#) provides criteria and types of entities that may be eligible for the appointment as bank agents.
- In 2013, under the prudential guidelines, CBK allowed faith-based or not-for-profit, a non-governmental organization, educational institutions, forex bureau or any other entity to act as agents.

## 3 Customer due diligence

- Under the Banking Act Cap 488 (the Banking Act) is regulated by the [Guidelines on Agent Banking CBK/PG/15](#) (the Agent Banking Guidelines).
- Institutions shall carry out customer due diligence (CDD) to ensure that requirements of anti-money laundering/combatting financing of terrorism (AML/CFT) are not compromised.
- Payment systems providers governed by the [National Payment Systems Act, 2011](#) and the [National Payment System Regulations, 2014](#) to comply with the Proceeds of Crime and Anti-Money Laundering Act and Regulations.



- The [Crime and Anti-Money Laundering Regulations, 2013](#) obligate providers to verify customer identity, maintain customer records, and report suspicious transactions.

## 4 Consumer protection

- [Guidelines on Agent Banking CBK/PG/15](#) provide for minimum requirements for consumer protection.
- Customer complaints to be addressed in 30 days from report.
- [National Payment System Regulations, 2014](#) allows a customer to file complaint with the payment system provider within 15 days from the date of occurrence. Resolution in within 30 days of being filed
- The [Consumer Protection Act, 2012](#) provides that the customer should be made aware of all costs of services.
- The [Data Protection Act, 2019](#), introduces international standards for customer data protection similar to GDPR.



- Current ambiguities in regulation impact quality of service, fair prices, and consumer protection standards.
- Disclosure of confidential customer information is prohibited, except when requested by law.



Georgina Goodwin, 2017 CGAP Photo Contest

## Recommendations on applicability of principles



# Recommendations on the applicability of principles (1)

## Principle 1: Enable rural CICO agents to generate more revenue streams

### Reduce costs further through single float management using agent and customer interoperability frameworks.

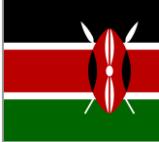
In urban Kenya, some agents serve up to 11 financial service providers, with separate devices, record keeping, and float management. Due to the high capital costs and need to maintain float for each provider, rural agents end up serving a few providers.

Interoperability between different providers float accounts for agents can help to reduce these capital costs and enable them to a wider array of customers. A shared agent network is also an approach that allows several financial service providers to share agency banking infrastructure and technology to serve more customers. A customer of one bank can thus use an agent established by another bank or financial institution.

### Add more services over and above CICO – tie-ups with physical distribution networks of e-commerce and e-citizen services.

Rural agents in Kenya make more money than their urban counterparts on account of lower costs. Also, there is higher competition amongst urban agents. While the median monthly profit is lower in rural areas, this is because of low population density or fewer transactions, but because the average transaction size is lower than in urban areas. Fewer e-commerce and e-citizen services are available in rural areas since such utility service providers do not offer digital payment services.

As providers expand agent network in rural areas, there is a need to enhance more use cases for digital money to sustain the CICO business case. Digital transformation of local authorities and service providers will consequently increase existing CICO revenue streams.



# Recommendations on the applicability of principles (2)

## Principle 2: Make CICO agents more accessible to rural customers, as defined by the local context

### Encourage providers to report geo-location data of agents, which may be compiled to assess the true spread of agent networks in rural and remote places.

Kenya is a diverse country. The growth of agents is happening along the urban agglomerations. There is a lack of publicly-available data on how accessible the reach of agents is in rural areas. There is a need to nuance the right proximate distance for a CICO agent.

FSDK has established the capability, however, there is no mandate or incentive for the providers to report the data. A critical distinction should be made between an agent till (either a special SIM card or a POS machine), used to perform transactions for clients, and an agent outlet (a physical location that carries one or more agent tills). Regulators, policymakers and financial service providers may then have real evidence of rural penetration of DFS access points to guide investment decisions.

### Focus on creating the right balance and interfacing between float-positive bank agents (and accounts) and float-negative MNO agents (and mobile wallets)

Rural agents are less float-positive than urban. There is also a bigger disparity in float capacity between agents in rural versus urban areas. There are thus much fewer bank agents (with higher float demand) in rural areas compared to MNO agents. MNO rebalancing relies on banking infrastructure at some point to manage liquidity; if this is possible in rural areas, it expands the coverage.

Subsidization or removal of customers' bank (account)-to-MNO (wallet) interoperability fees will increase access to both financial instruments while recognizing float management capacity of rural agents.

# Recommendations on the applicability of principles (3)



## Principle 3: Expand the range of people that can serve as CICO agents

### Streamline the requirements for becoming an agent across banks and non-banks.

The NPS regulations and Agent Banking Guidelines provide exhaustive criteria and types of entities that may be eligible for the appointment as mobile money and bank agents, respectively. Despite these guidelines, we have seen the prevalence of informal agents in specific remote locations in Kenya, spurred by their inability to meet the 'stringent' demands required by regulatory and financial service providers policies. Also, the requirements and procedures to become a bank agent and mobile money agent differ significantly.

Streamlining and updating these policies should lower the barriers to entry and enable expansion of agent access points in rural areas.

### Build tiered categories of agents to provide differentiated entry-levels of potential agents.

Differentiating agent types based on services provided and providing corresponding enabling regulation can deepen the penetration of financial access points in rural areas.

Such tiers could include service agents (basic cash-in and cash-out), sales agents (sophisticated, product sales), and ecosystem agents (sales and service of financial as well as non-financial products and services). Tiered requirements and processes across these three types would differ, as would their respective remuneration.

### Actively build the case for rural agent expansion through incentivization of service providers to expand to presumably less profitable areas to achieve critical mass.

The initial expansion of agent networks saw significant upfront investment by service providers to realize the long-term return on investments with the achievement of the critical mass. Further expansion of agent networks into rural areas requires even more stimulus investments to overcome infrastructure constraints. Government and regulatory incentives can catalyze the expansion of rural agent networks.

# Recommendations on the applicability of principles (4)



## Principle 4: Identify and manage consumer protection and other risks posed by rural agents without stopping innovation

### Implement customer protection, data protection, and cyber security acts through appropriate regulations.

The core issues related to enhancing uptake and usage of digital finance in rural areas are around grievance redressal and fraud prevention. Rural users have some degree of trust and confidence in the agents, however, there is a lack of understanding of how grievance redressal works in case there are issues. Furthermore, current ambiguities in regulations impact quality of service, pricing, and consumer protection.

Beyond drafting of appropriate regulations, enforcement of enabling regulations requires both further investments in traditional and novel approaches to remote monitoring and compliance.

### Build coherence amongst the domestic regulators to reduce opportunities for regulatory arbitrage around consumer protection.

Regulation of digital financial services has seen overlapping of jurisdictions in Kenya. Consumer protection, and the lack of it, invariably affects rural customers more due to lower capacity of enforcement and grievance redressal in rural areas. Reducing the need for regulatory arbitrage can significantly be increased by ensuring local authorities in rural areas are enabled and mandated to execute consumer protection measures for financial service provision.

Domestic regulators should collaborate on to develop and disseminate adequate consumer protection principles.



# Recommendations on the applicability of principles (5)

## Principle 5: Develop a data-driven strategy to close the gender gap in CICO access and use

### Encourage providers to collect and report gender-disaggregated data of users and agents to assess and address gender disparities in access and supply of financial services.

Current gender policies focus on the collection and analysis of data and information required for the design, monitoring, and evaluation of policies and projects for women. These, however, do not specifically focus on enabling digital financial services and how information from such disaggregated data can be used to promote the development of gender-intentional products and services to reduce gender disparity in access, especially in rural areas.

Compile gender-disaggregated data of users and agents to assess how relevant and appropriate digital financial services bridge gender gap issues.

### Build gender focus in design, monitoring and evaluation policies and projects on digital financial services for women. Report gender-disaggregated data sets to all stakeholders.

Focus on implementation of policies that mandate collection and analysis of gender-disaggregated data and information should also translate to development and implementation of policies that mandate gender-intentional product development, monitoring and evaluation.

Establish objectives to reduce gender parity in the provision and access to financial services.



# Recommendations on the applicability of principles (6)

## Principle 6: Expand public and private partnerships that share CICO agent networks

### **Gradually shift all G2P and P2G transfers to digital platforms.**

Digitization of national government and local authority payments can significantly enable the development of digital ecosystems. G2P payments that target employees and service providers of local and government authorities have primarily been digitized. There are laudable efforts to digitize the distribution of conditional social benefits to the public, although these do not sufficiently extend to the last mile of withdrawal and usage. Distributing authorities are often working with single financial service providers meaning beneficiaries often lack ubiquity in access and variety in the quality of financial services offered. Digital P2G transfers are also significantly lacking in rural areas, as are use-cases for digital payments in local business ecosystems.

A concerted effort by local and national authorities to liberate as well as streamline digital G2P and P2G ecosystems through proven and replicable approaches will increase the usage and impact of digital payments.

### **Extend digitization of rural public and private utility service provider payments to use OTC cash-in payments as a stepping stone to DFS ecosystem expansion.**

There is a lack of use cases for digital public and private utility payments in rural areas. Users in rural areas prefer to keep money in cash form because it is the most fungible form of value exchange for their daily financial routines. Given that a significant amount of expenses are for household utility payments in cash for both public and private services, most households have to deal with the inconveniences that come along with it.

A first step to develop a digital ecosystem is to enable over-the-counter payments into a digital ecosystem through agents whereby customers may transact without having a financial instrument or stringent KYC.

### **Encourage the providers to expand rural outreach networks through subsidies in the form of set up costs, additional commissions, one time costs, investments in infrastructure etc.**

Public-private partnerships can enable deepening of digital ecosystem through digitization.

Local authorities can seldom reach the last mile without incentivized partnerships with private entities that already provide services that penetrate the targeted rural networks.



Farming in Kenya. Photo credit: Wim Opmeer, 2016 CGAP Photo Contest

# Appendix



## Appendix 1: Historical perspective and context (1/2)

### From 1999 to 2007, advances in the financial sector led to deepening of access, increasing usage, and enhancing uptake of formal financial services

- Kenyan banking sector underwent several evolutionary phases as follows:
  - Immediately after the independence, the first phase, commonly known as **Harambee**, from 1963 to 1980, saw the creation of government-owned banks including two new banks – Co-operative Bank of Kenya and National Bank of Kenya – in 1968.
  - The second phase, **Nyayo**, saw a large increase in banks and non-banking financial institutions including the creation of local banks, several of which had strong political connections.
  - The third phase, **Liberalization**, from 1990 to 1999, saw an explosion in the growth of banks but was also characterized by instability, with a large number of bank failures. Between 1990 to 1994, ATMs became cheaper as new service providers (Wincor) entered the Kenyan market and banks connected ATMs at the branches. Banks began to see ATMs as a way to enhance outreach. Most banks started deploying the ATMs using hub and spoke distribution model.
- It is important to note that financial access was not a major consideration for banks or the Central Bank of Kenya during these three phases.
- From 1999 to 2007 was a transformative phase for the banking sector in Kenya. It was characterized by:
  - Changes in the regulatory environment including an increase in minimum capital requirements, the reinforcement of single borrower limits and restricted lending to insiders.
  - From 2004 onwards, there was a marked increase in bank branches and ATMs both in terms of numbers and geographic coverage. The increased footprint of the banking sector led to an increase in the deposit accounts from 2 million in 2004 to 6 million in 2008.
  - Towards the late 2000s, banks toyed with the idea of bank-on-wheels. These were not recognized as actual branches since they represented the ‘mother branch’. Central Bank of Kenya would approve such on case-by-case basis, as the banks applied for these as a product or service extension of the branch. The approach did not make economic sense for many banks as the daily cost of deployment was lower than the revenue from transactional income and deposits mobilized.
- Thus, from 1999 to 2007, the banking sector deepened, became less concentrated, and more stable. Furthermore, while financial access increased, there was still a long way to go to increase financial access to the low- and moderate-income populations in the peri-urban and rural areas.

Source: Kenya's Financial Transformation in the 21st Century, Edited by Amrik Heyer and Michael King, FSD Kenya; Interviews with key informants



# Appendix 1: Historical perspective and context (2/2)

## Transportation and telecommunications infrastructure growth happened around the clustered urban agglomerations in Kenya

The transportation infrastructure in Kenya comprises of roads and rails. Roads link the clustered urban agglomerations with the rural and remote places and are subsidiary to the colonial railway system built from the coast to the western parts of the country.

Telecommunications infrastructure has greatly expanded since the early 1980s in Kenya. Cellular telephone services and mobile internet flourished since the beginning of 2000s. It is important to note that the telecommunications infrastructure growth happened around the clustered urban agglomerations in Kenya.

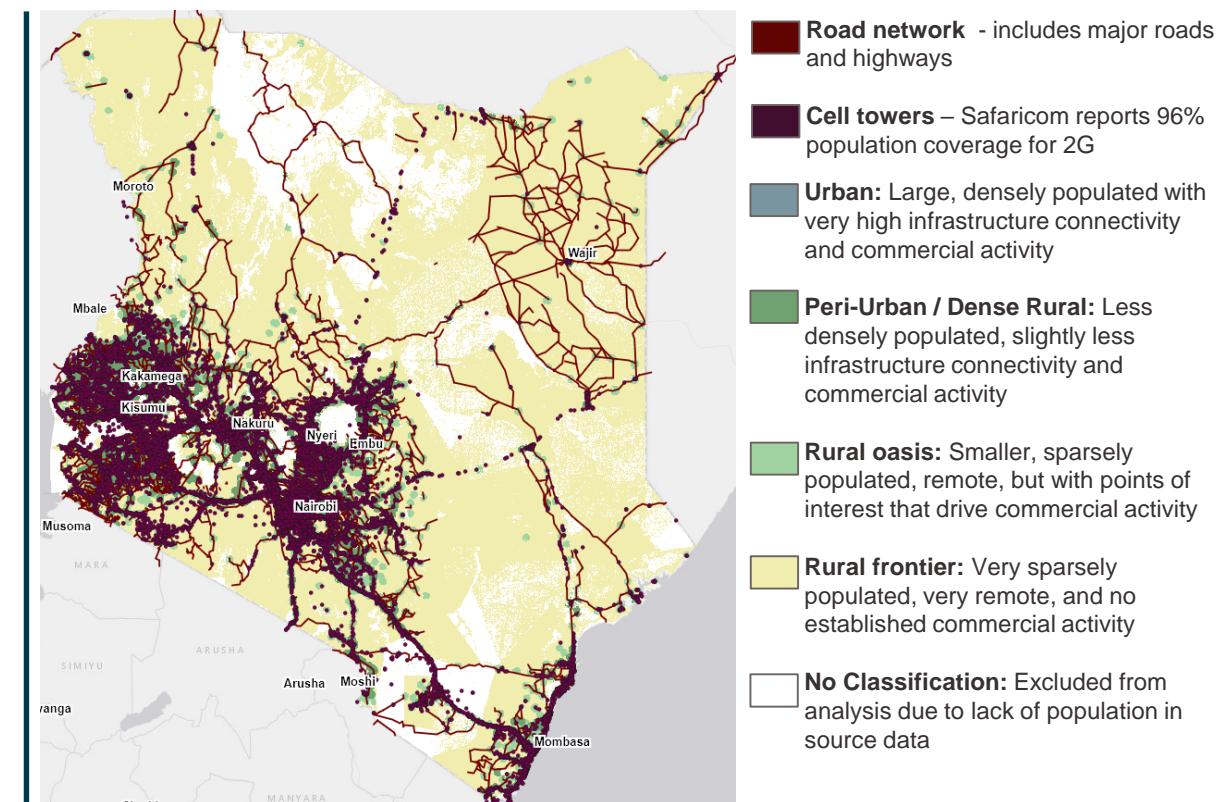
In line with the spread of transportation and telecommunications in the country, the CICO growth happened around the clustered urban agglomerations. Our analysis shows that whatever little agent growth that happened, outside the urban areas, are centered around:

- Main roads and highways;
- Tourist attractions and international borders; and
- Centers of economic activities, such as markets and refugee camps.

The northern counties in Kenya, namely, Wajir, Mandera, Marsabit, and Turkana have extremely low number of agent outlets on account of:

- Limited economic activity;
- Lack of basic infrastructure; and
- Climatic and demographic nuances.

Road and cellular infrastructure in Kenya



Source: BCG CICO Economics Research Kenya, 2019

- 5 kilometer is typical distance traveled for weekly market trips
- 5.7 kilometer is the median distance traveled by lowest income quintile for fertilizer market\*

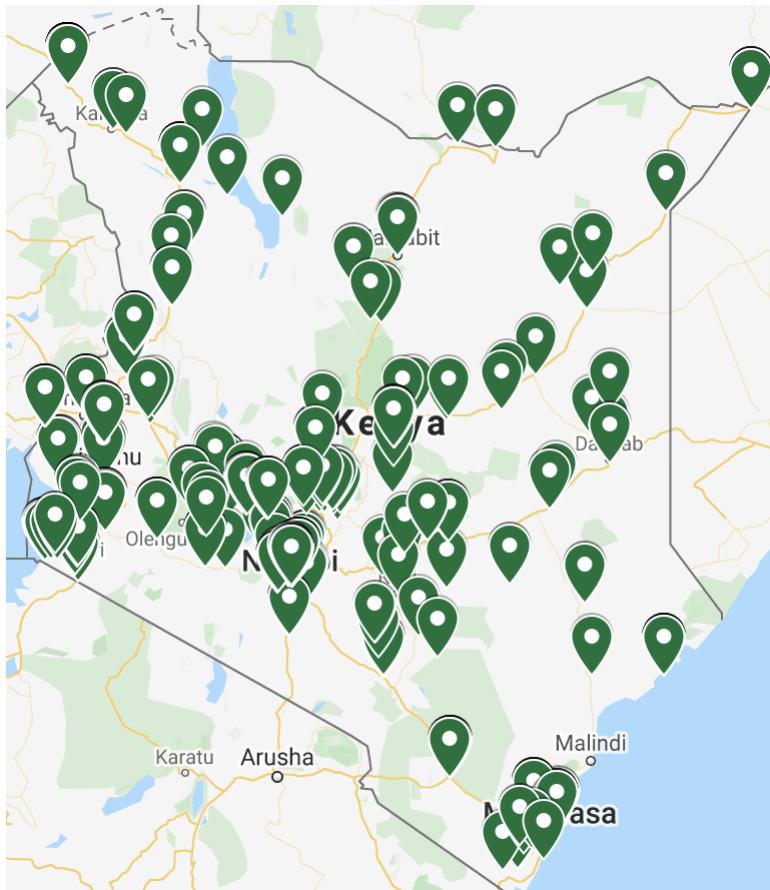
\*Source: The Reality of getting from point a to point b in rural Kenya (2016)



## Appendix 2: M-Pesa and Equity's agents in Kenya

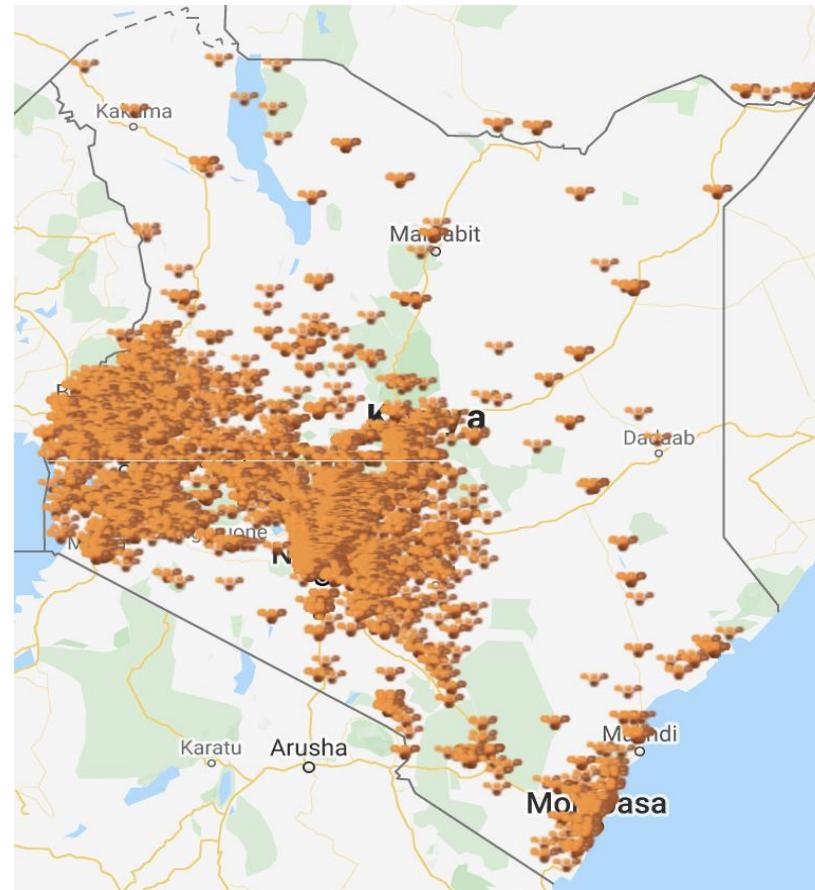
(only about 25-35% of agents for major providers are in rural areas)

M-Pesa, representation map of agents, 2019  
(One pin represents several agents)

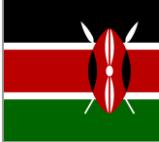


Source: Representational map of M-Pesa agents plotted on Google Maps, 2019

Equity agent locator, 2019

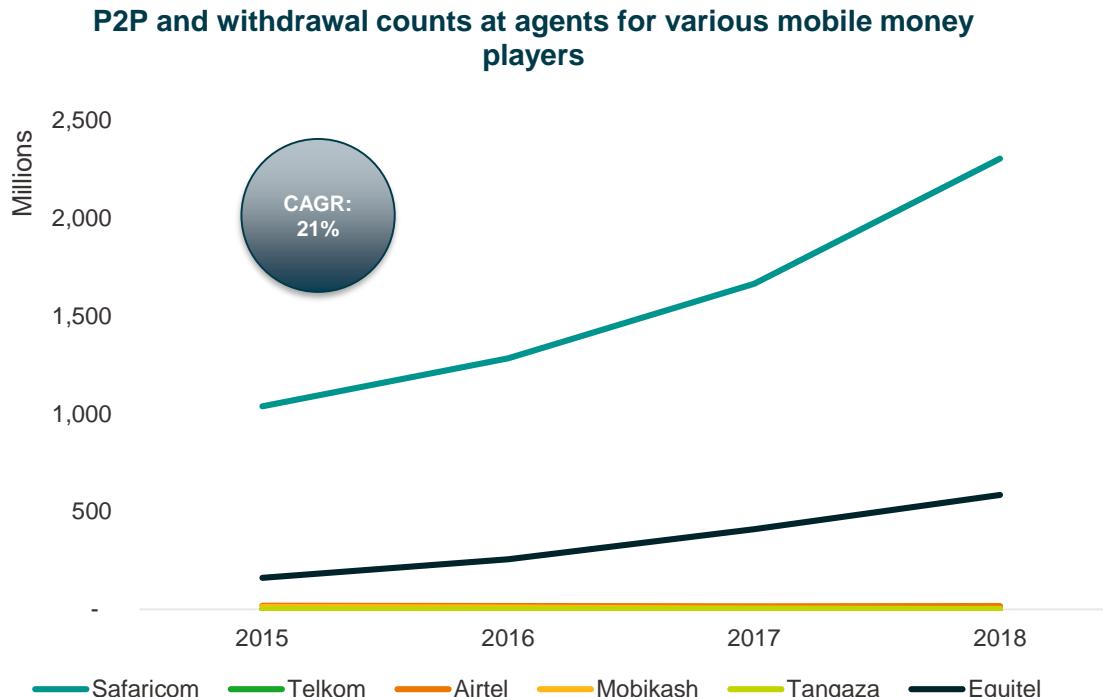


Source: Equitel Agent Locator, 2019



## Appendix 3: Mobile money transactions (2015-18) (1/2)

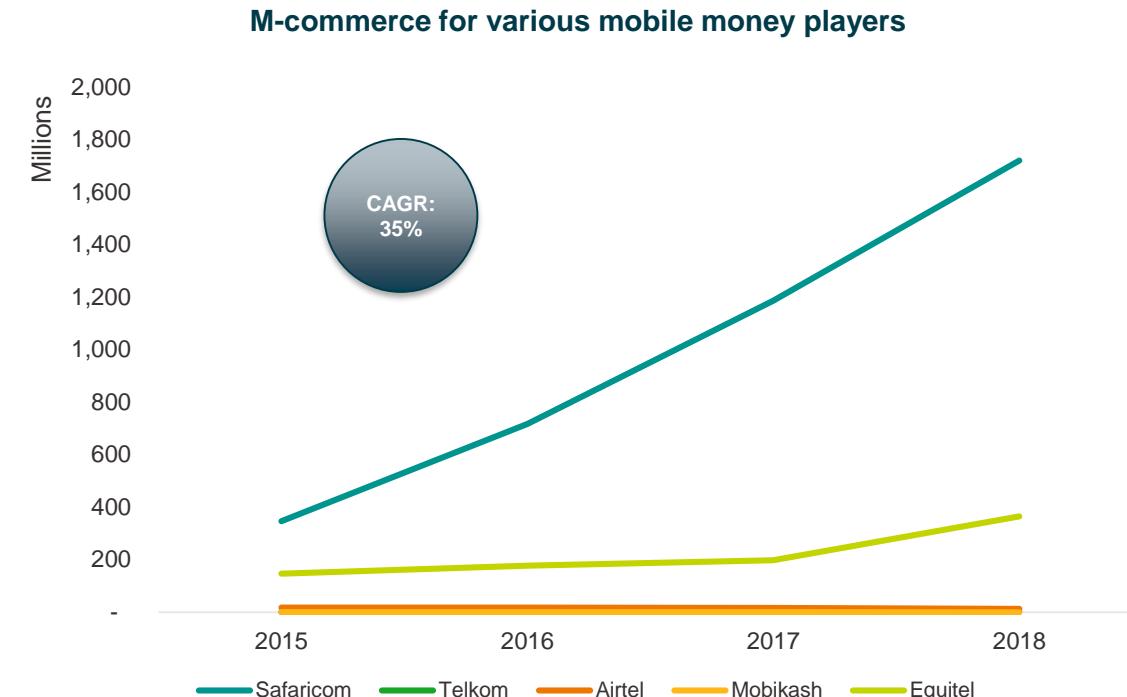
### P2P and withdrawal counts grew significantly lower than that of M-commerce services counts



While over the period, P2P and withdrawal counts at mobile money agents rose, the growth of P2P and withdrawal is significantly lower than that of M-commerce services. The front runners, Safaricom and Equitel offer over 98% of P2P and withdrawal services in the market.

#### Definitions

- **P2P transfers:** Local remittances from one person to another.
- **M-commerce:** Transactions for purchase and sales of goods and services through use of mobile money. Includes: C2B, B2C, B2B, C2G, G2C
- **Withdrawals:** Mobile money to physical cash withdrawal at agent or ATM

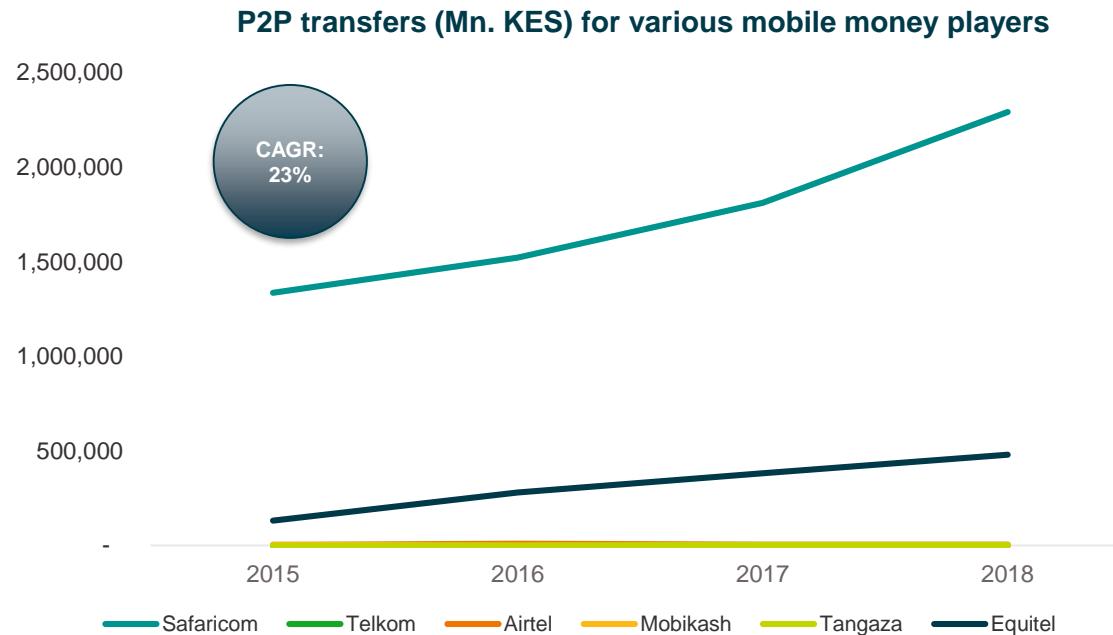


M-commerce services by Safaricom and Equitel rose over the period of 2015 to 2018. Safaricom and Equitel manage 97% of m-commerce transactions.

# Appendix 3: Mobile money transactions (2015-18) (2/2)



The value of m-commerce is growing much more rapidly than P2P transfers and withdrawals

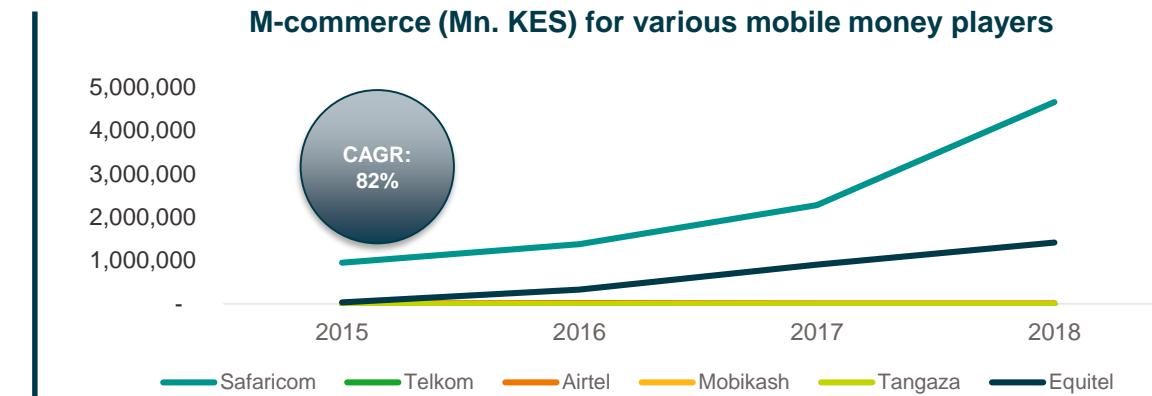


Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

Over the period, P2P transfers rose, however, the growth of P2P transfers was significantly lower than that of M-commerce services by mobile money providers. Also, P2P transfers, by value, grew much more slowly than withdrawals. Safaricom and Equitel offer over 99.55% of P2P transfer by value, in the market.

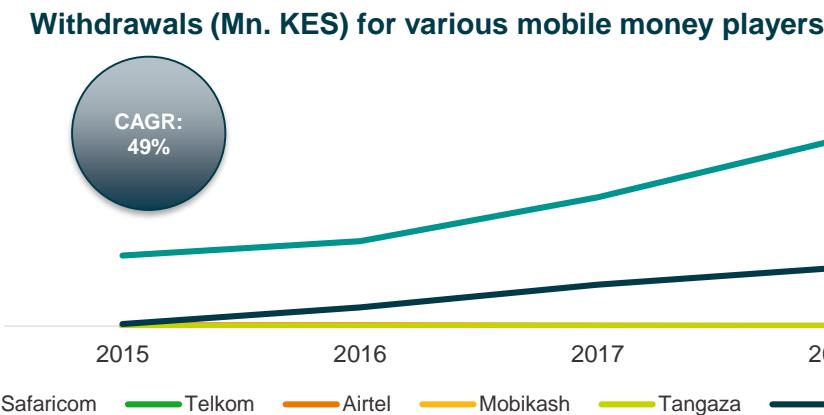
#### Definitions

- P2P transfers:** Local remittances from one person to another.
- M-commerce:** Transactions for purchase and sales of goods and services through use of mobile money. Includes: C2B, B2C, B2B, C2G, G2C
- Withdrawals:** Mobile money to physical cash withdrawal at agent or ATM



Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

M-commerce services, by value, is steadily rising over the period of 2015 to 2018. The front runners, Safaricom and Equitel offer over 99.8% of m-commerce by value, in the market.



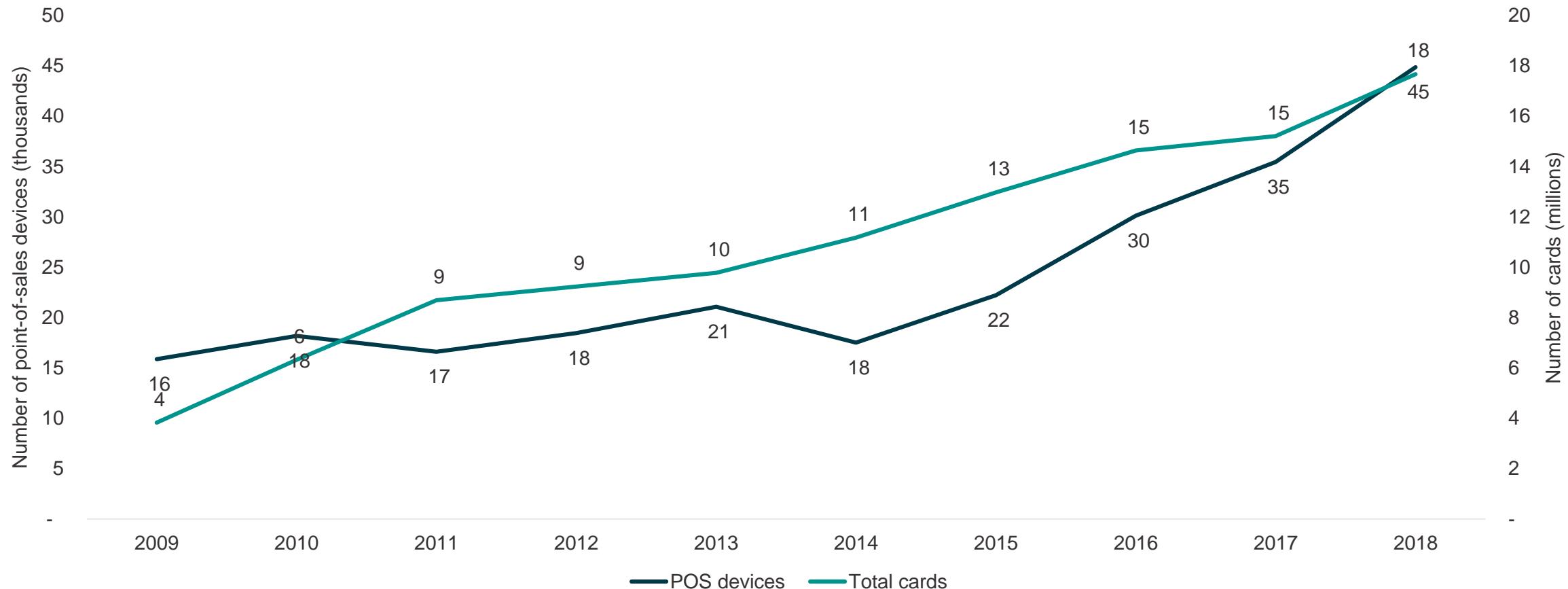
Source: Central Bank of Kenya, Supervision reports 2007-19; Communications Authority of Kenya, Annual reports 2007-19

The front runners, Safaricom and Equitel offer over 99.95% of withdrawals by value, in the market.

## Appendix 4: Point-of-sales device and cards have been growing steadily



POS and cards growth (2009-18)



Note: POS growth may be different for agent's POS versus merchant's POS. Agent's POS are not interoperable, whereas merchant's POS's are interoperable.



# Appendix 5: Why Safaricom is a dominant player in Kenya? (1/3)

## The genesis of Safaricom and the launch of M-Pesa

- 1993: Safaricom launched operations based on an analogue ETACS network as a department of Kenya Posts & Telecommunications Corporation (KPTC), the former monopoly telecommunications operator in Kenya.
- 1996: Safaricom upgraded to GSM, the license was awarded in 1999.
- 1997: Safaricom Ltd. was formed as a private limited liability company.
- 1998: Liberalization of the telecommunications sector. Through the Kenya Information and Communications Act, 1998, KPTC transitioned to three units. One of the units was Telkom Kenya (a public telecommunications operator formed under the Companies Act). Safaricom became a subsidiary of Telkom to meet the demand for cellular phone connections.
- 2000: Vodafone UK acquires stake in Safaricom through its locally-owned subsidiary, Vodafone Kenya.
- 2002: Safaricom Ltd. became a publicly traded company.
- 2007: Launch of M-Pesa, mobile money services by Safaricom (resulting from a pilot on mobile money remittances in 2005-06).
- 2008: Acquisition of One Communications Limited to enhance the data services and offer high-speed mobile internet facilities.

## The differentiating factors and the steps to create a competitive advantage for Safaricom

- While the other prevalent players during 2002-10, focused on high-income markets, Safaricom actively focused on the low- and moderate-income populations through:
  - Reduced price of new sim cards from KES 2,500 to KES 99. Lower denomination scratch cards. Sambaza – airtime sharing.
  - Payphones, commonly referred to as '*Simu ya Jamii*'.
  - Billing per second as opposed to other players billing per minutes. Free beeping or flashing services (as opposed to other players that deducted minutes even when flashing), followed by request for call back services SMS for free.
  - Leverage M-Pesa to create a use case to build loyalty. Policy of allowing two urban agent points only when the interested persons committed to opening one agent point in rural areas. Developed and implemented agent network management principles from scratch.
  - Use Safaricom Foundation to build positive sentiments across the market through corporate social responsibility. The foundation is primarily funded by the interest earned from the trust account held with the banks for the mobile money services.
  - Collaborations, acquisitions, and partnerships to create use cases, such as M-Shwari, M-Ledger, Lipa na M-Pesa, M-Akiba etc.



# Appendix 5: Why Safaricom is a dominant player in Kenya? (2/3)

As M-Pesa evolved, it tweaked its strategy along the evolution path

2007 Nascent	2008 Steady growth	2009 Critical mass	2012 Apex	2014 onwards Mature
M-Pesa initially paid up to \$3 for registration to agent. (then reduced to \$1). Aggressive agents own several outlets and make large profits. Early agents <u>unofficially recruited sub-agents</u> to enhance profit.	M-Pesa partners with distribution outlets, integrates with <u>banks, ATMs</u> and bill collectors. More customers pay, save, and cash-in (pull) digitally meaning reduced total pay outs to agents. Aggregator Agents introduced and split commissions with agents (earn 20% of agents commission).	As the network grew, the competition among agents increased and the individual profit dropped. <u>Aggregator agents introduced</u> and take 20% from agents.	M-Pesa makes more from <u>P2P and merchant</u> thus can afford to <u>give back more to agents</u> . Banks struggle to match MNO agents anchored to M-Pesa's better compensation and liquidity management. Banks struggle to match MNO agents' remuneration anchored to M-Pesa's better compensation and liquidity management.	Agency business <u>becomes less attractive</u> for new agents, less <u>dedicated</u> , they diversify income. Provider pays more for deposits than withdrawals to incentivise agent-driven deposits.

M-Pesa's agent network growth resulted from the shared prosperity model

Financial year	Commission paid out (KES Bn.)	M-Pesa Revenue (KES Bn.)	Percentage of revenue paid out	Total number of agents	Average gross earnings per agent per month (KES)
2019	22.256	74.991	29.7%	167,000	11,106
2018	19.765	62.907	31.4%	156,000	10,558
2017	17.751	55.084	32.2%	130,000	11,379
2016	14.685	41.499	35.4%	100,744	12,147
2015	12.284	32.625	37.7%	85,756	11,937
2014	10.684	26.561	40.2%	81,025	10,988
2013	8.595	21.844	39.3%	65,547	10,927

Source: Safaricom's annual reports, 2013-19

In the last seven years, Safaricom shared, on an average, around one-thirds of commissions earned with the agents.

Financial year	Total revenue (KES Bn.)	M-Pesa Revenue (KES Bn.)	Percentage of revenue from M-Pesa	P2P revenue (% of overall M-Pesa Revenue)	New business revenue (% of overall M-Pesa Revenue)	Withdrawal revenue (% of overall M-Pesa Revenue)
2019	240.303	74.991	31.2%	33.5%	28.1%	38.4%
2018	224.535	62.907	28.0%			
2017	204.109	55.084	27.0%			
2016	177.784	41.499	23.3%	34.2%	18.4%	47.4%
2015	163.364	32.625	20.0%			
2014	144.672	26.561	18.4%			
2013	124.288	21.844	17.6%			

Source: Safaricom's annual reports, 2013-19

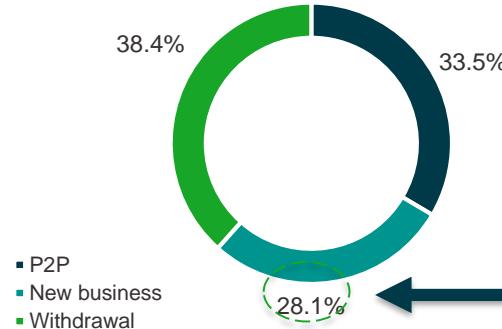
Safaricom's share of revenue from M-Pesa has increased from 17% in 2013 to 31% in 2019. Also, Safaricom is gradually enhancing its revenue share from non-CICO, digital ecosystem sources such as digital credit and B2C2B.



# Appendix 5: Why Safaricom is a dominant player in Kenya? (3/3)

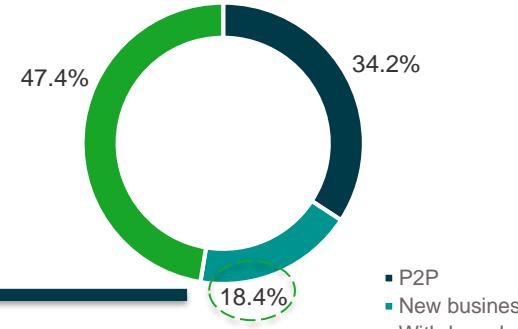
## M-Pesa's growth in new business is exceeding the growth in its traditional services

**Break up of revenue (2019)**



Source: Safaricom's annual reports, 2016 and 2019

**Break up of revenue (2016)**

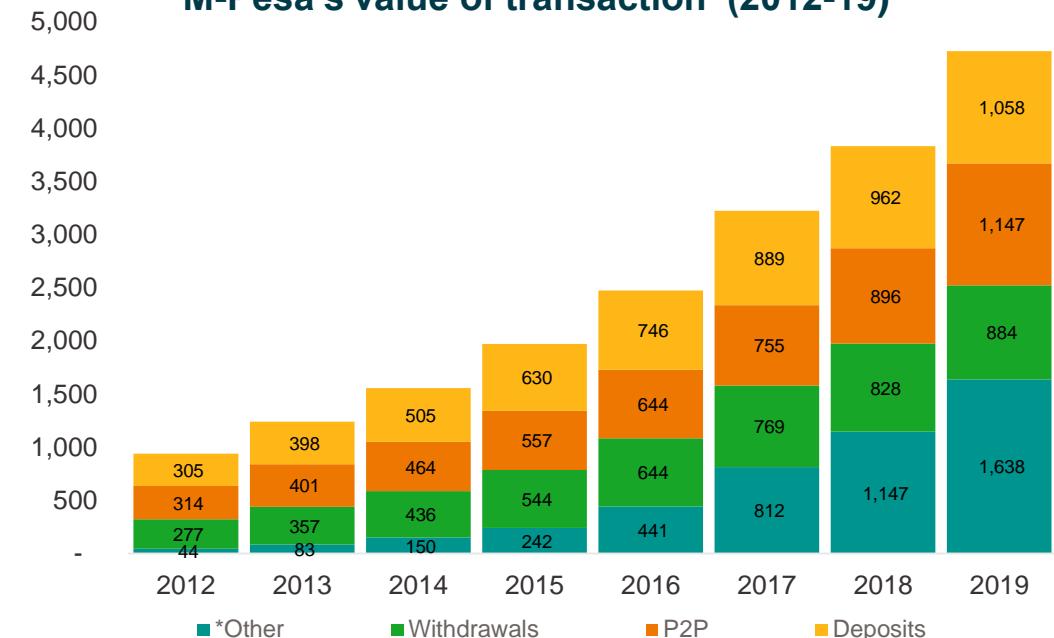


M-Pesa is diversifying the revenue contribution outside of its bread and butter, which was the core services of P2P and cash-out.

### Revenue contribution from various services

- Safaricom launched Lipa Na M-pesa in 2016, with 36,000 merchant point-of-sales devices reported in the first year. By 2019, M-Pesa had 109,000 active Lipa na M-Pesa merchants.
- In 2016, Safaricom reported that the average active M-Pesa user was performing 6.7 transactions per month which increased to 12 transactions per month by the end of 2019.
- Revenue for M-Pesa has grown by 80.7% since 2016.
- M-Pesa's active customer base has grown by 24.7% over the same period (2016-19)
- New business' contribution to revenue increased from 18.4% in 2016 to 28.1% in 2019.

**M-Pesa's value of transaction (2012-19)**



Source: Safaricom's half-yearly reports, 2012-19

### Other transactions are made up of:

- The changes in revenue is mirrored by the changes in the transaction values of customers.
- Whereas other transactions have grown by 271% since 2016.



# Appendix 6: Practices and challenges to expand in rural areas for agent networks in Kenya

Attributes	Liquidity management	Agent recruitment	Training	Monitoring and supervision
<b>Current practices</b>	<ul style="list-style-type: none"> <li>Several liquidity runs required to rebalancing points</li> <li>95% agents take 30 minutes or less to reach a bank for rebalancing</li> <li>Lower float for mobile money agents versus the bank agents</li> <li>Float negative mobile money agents versus float positive bank agents</li> </ul>	<ul style="list-style-type: none"> <li>Earlier entrants – self managed</li> <li>MNO and the late entrants - outsourced to third-parties</li> <li>Requires physical forms for on-boarding</li> <li>Mobile money agent and bank agent on-boarding processes are different</li> <li>Mostly standalone agents for mobile money</li> <li>Agents offer services from several players</li> </ul>	<ul style="list-style-type: none"> <li>Most agents are trained at the induction stage. Only few receive refresher training</li> <li>Providers tend to delegate induction training to aggregator, employer agent, and third parties. A minority of agents report being trained directly by provider</li> <li><u>Poorly trained and monitored agents</u> tend to become inactive, offer poor quality services and contribute low revenues for agents and provider</li> </ul>	<ul style="list-style-type: none"> <li>Too many agents are left to their own devices and never receive monitoring or support visits</li> <li>The frequency of support visits is erratic</li> <li>Ineffective support visits. Even when agents are visited, not much value is added</li> </ul>
<b>Challenges to reach the last mile</b>	<ul style="list-style-type: none"> <li>Lack of sufficient number of rebalancing points in close proximity</li> <li>Lack of agent level interoperability that results in separate float requirements for each provider</li> <li>Higher cash outs for mobile money agents</li> <li>Higher cash ins for bank agents</li> </ul>	<ul style="list-style-type: none"> <li>Several trips required to recruit an agent in rural areas – for form filling, branding, training etc.</li> <li>Lack of contextual knowledge of the recruiting teams</li> <li>Lack of awareness amongst business persons in rural areas of the benefits of becoming an agent</li> <li>Poor agent and customer value proposition in rural areas</li> </ul>	<ul style="list-style-type: none"> <li>Distance from the town and city centers</li> <li>Lower digital capability</li> <li>Training focus on transaction processing with limited focus on selling</li> </ul>	<ul style="list-style-type: none"> <li>Distance from the town and city centers</li> <li>Lower digital fluency</li> <li>Cost implication for the provider</li> </ul>



## Appendix 7: Business model analysis (1/5)

### Business model of a mobile money provider – Mobile network operator

Key partners	Key activities	Value proposition	Customer relationships	Customer segments
<ul style="list-style-type: none"><li>Aggregators and agent network managers</li><li>Agents</li><li>Merchants</li><li>Service providers including technology firms</li><li>Banks (for float management)</li><li>Transaction support</li><li>Infrastructure providers</li><li>Investors</li></ul>	<ul style="list-style-type: none"><li>Business development and operations management</li><li>Channel management and distribution</li><li>Product and services implementation</li></ul> <p><b>Key resources</b> </p> <ul style="list-style-type: none"><li>Financial</li><li>Human</li><li>Physical</li><li>Intellectual</li></ul>	<p><b>Use cases</b></p> <ul style="list-style-type: none"><li>Remittance</li><li>Payments</li><li>Credit</li><li>Savings</li><li>Fund raising</li><li>Insurance</li><li>Bulk transfers</li></ul> <p><b>System</b></p> <ul style="list-style-type: none"><li>Safe</li><li>Secure</li><li>Reliable</li></ul> <p><b>Services</b></p> <ul style="list-style-type: none"><li>Accessible</li><li>Affordable</li></ul>	<ul style="list-style-type: none"><li>Self service</li><li>Agent and staff assisted</li><li>Data analytics backed</li><li>Incentives and promotions</li></ul> <p><b>Channels</b> </p> <ul style="list-style-type: none"><li>USSD, STK, SMS, Web, App</li><li>Agents, merchants, POS</li><li>ATL /BTL marketing</li></ul>	<ul style="list-style-type: none"><li>All demographic, socio-economic, and psychographic segments</li><li>Agents and merchants</li><li>Government agencies and parastatals</li><li>Private Companies</li><li>Utility companies</li><li>Banks and other non-bank financial service providers</li></ul>
<b>Cost structure</b>			<b>Revenue streams</b>	
<ul style="list-style-type: none"><li>Fixed costs: Set up and launch; management and maintenance</li><li>Variable costs: Acquisition and service; access points, and agents</li></ul>			<ul style="list-style-type: none"><li>Fees from core and cross sales services</li><li>Float income and intermediation benefits</li><li>Transaction margins</li></ul>	



## Appendix 7: Business model analysis (2/5)

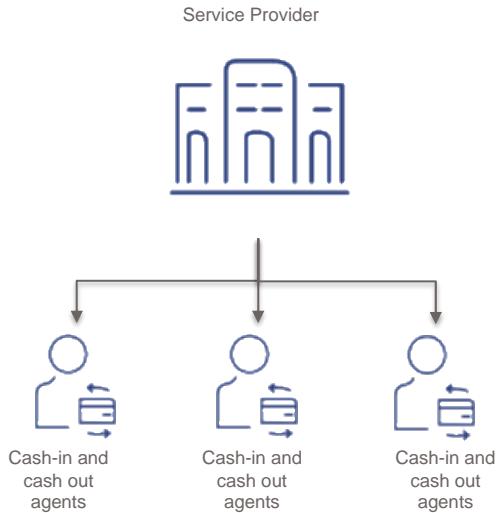
### Business model of an agent banking service provider – Bank

Key partners	Key activities	Value proposition	Customer relationships	Customer segments
<ul style="list-style-type: none"><li>Agents</li><li>Mobile virtual network operator (MVNO)</li><li>Merchants</li><li>Service providers and technology firms</li><li>Transaction support</li><li>Infrastructure providers</li><li>Investors</li></ul>	<ul style="list-style-type: none"><li>Business development and operations management</li><li>Channel management and distribution</li><li>Product and services implementation</li></ul> <p><b>Key resources</b> </p> <ul style="list-style-type: none"><li>Financial</li><li>Human</li><li>Physical</li><li>Intellectual</li></ul>	<p><b>Use cases</b></p> <ul style="list-style-type: none"><li>Remittance</li><li>Payments</li><li>Credit</li><li>Savings</li><li>Fund raising</li><li>Insurance</li><li>Bulk transfers</li></ul> <p><b>System</b></p> <ul style="list-style-type: none"><li>Safe</li><li>Secure</li><li>Reliable</li></ul> <p>Services</p> <ul style="list-style-type: none"><li>Accessible</li><li>Affordable</li></ul>	<ul style="list-style-type: none"><li>Self service</li><li>Agent and staff assisted</li><li>Data analytics backed</li><li>Incentives and promotions</li></ul> <p><b>Channels</b> </p> <ul style="list-style-type: none"><li>USSD, STK, SMS, Web, App</li><li>Agents, merchants, POS branches, ATMs</li><li>ATL /BTL marketing</li></ul>	<ul style="list-style-type: none"><li>All demographic, socio-economic, and psychographic segments</li><li>Agents and merchants</li><li>Government agencies and parastatals</li><li>Private Companies</li><li>Utility companies</li><li>Banks and other non-bank financial service providers</li></ul>
<p><b>Cost structure</b> </p> <ul style="list-style-type: none"><li>Fixed costs: Set up and launch; management and maintenance</li><li>Variable costs: Acquisition and service; access points, and agents</li></ul>		<p><b>Revenue streams</b> </p> <ul style="list-style-type: none"><li>Fees from core and cross sales services</li><li>Float income and intermediation benefits</li><li>Transaction margins</li></ul>		

# Appendix 7: Business model analysis (3/5)

## Agent network management for mobile network operators and banks in Kenya

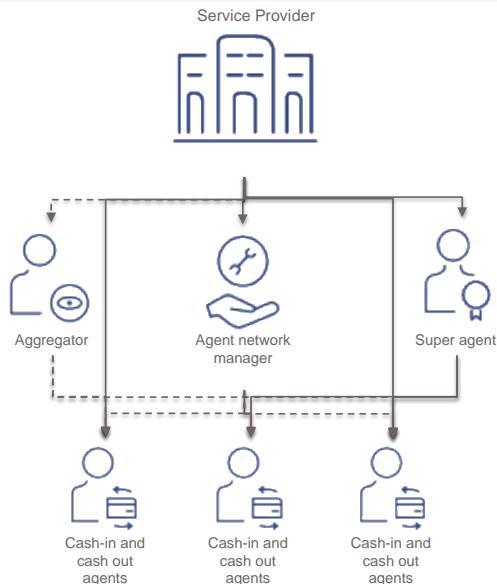
### Agent network management by Equity Bank (a bank)



#### Direct hierarchy

- Most nascent mobile money providers begin with a direct hierarchy model.
- There are few agents mostly located around providers' branches or service centers in 'hub and spoke' model.
- All the banks in Kenya use direct hierarchy model.
- Providers typically share revenue with agents. They split them at a ratio of 60% to the provider and 40% to the agent.

### Agent network management by Safaricom (an MNO)



#### Complex hybrid hierarchy

There are three entities involved:

- Aggregators manage and recruit agents and earn a share of their commissions in the ratio of 80 to agents and 20 to aggregators.
- Agent network managers promote sales, distribute consumables, and ensure compliance. They are hired by and paid by the provider separately, and thus do not affect agent commissions.
- Super agents, mostly banks, help with float rebalancing and charge agents 0.1% of rebalancing amount.

Providers typically share revenue with agents and aggregators. They split the revenue at a ratio of 67% to the provider, 7% to the aggregator, and 26% to the agent. Safaricom's M-Pesa has a complex hybrid model.

#### Legend:

	Service Provider
	Aggregators
	Retail Agent
	Agent Network Manager
	Super Agents



## Appendix 7: Business model analysis (4/5)

### Business model for an aggregator depends on scale and outreach

Key partners	Key activities	Value proposition	Customer relationships	Customer segments
<ul style="list-style-type: none"><li>Agents</li><li>Mobile network operator (MVNO)</li><li>Service providers</li><li>Banks (for MNOs)</li><li>Technology service providers</li><li>Transaction support</li><li>Infrastructure providers</li></ul>	<ul style="list-style-type: none"><li>Business development and operations management</li><li>Channel management and distribution</li></ul>	<p><b>Services</b></p> <ul style="list-style-type: none"><li>Network reach</li><li>Number of agents</li><li>System uptime</li></ul> <p><b>System</b></p> <ul style="list-style-type: none"><li>Safe</li><li>Secure</li><li>Reliable</li></ul>	<ul style="list-style-type: none"><li>Data analytics backed</li><li>Incentives and promotions</li></ul>	<ul style="list-style-type: none"><li>Agents and merchants</li><li>Banks and other non-bank financial service providers</li><li>Utility companies</li><li>Private companies</li><li>Government agencies and parastatals</li></ul>
<p><b>Key resources</b> </p> <ul style="list-style-type: none"><li>Financial</li><li>Human</li><li>Physical</li><li>Intellectual</li></ul>			<p><b>Channels</b> </p> <ul style="list-style-type: none"><li>USSD, STK, SMS, Web, App</li><li>Technology-backed interfaces for real time analysis</li></ul>	
<p><b>Cost structure</b> </p> <ul style="list-style-type: none"><li>Fixed costs: Set up and launch; management and maintenance</li><li>Variable costs: Acquisition and service; access points and agents</li></ul>		<p><b>Revenue streams</b> </p> <ul style="list-style-type: none"><li>Transaction commissions split</li><li>Management and licensing fees</li></ul>		

Note: Aggregators in the Kenyan context refers to technology service providers, some of whom also double as agent network managers. They provide the technology to efficiently and effectively manage CICO networks and sometimes own or manage operational dynamics of the distribution network.



## Appendix 7: Business model analysis (5/5)

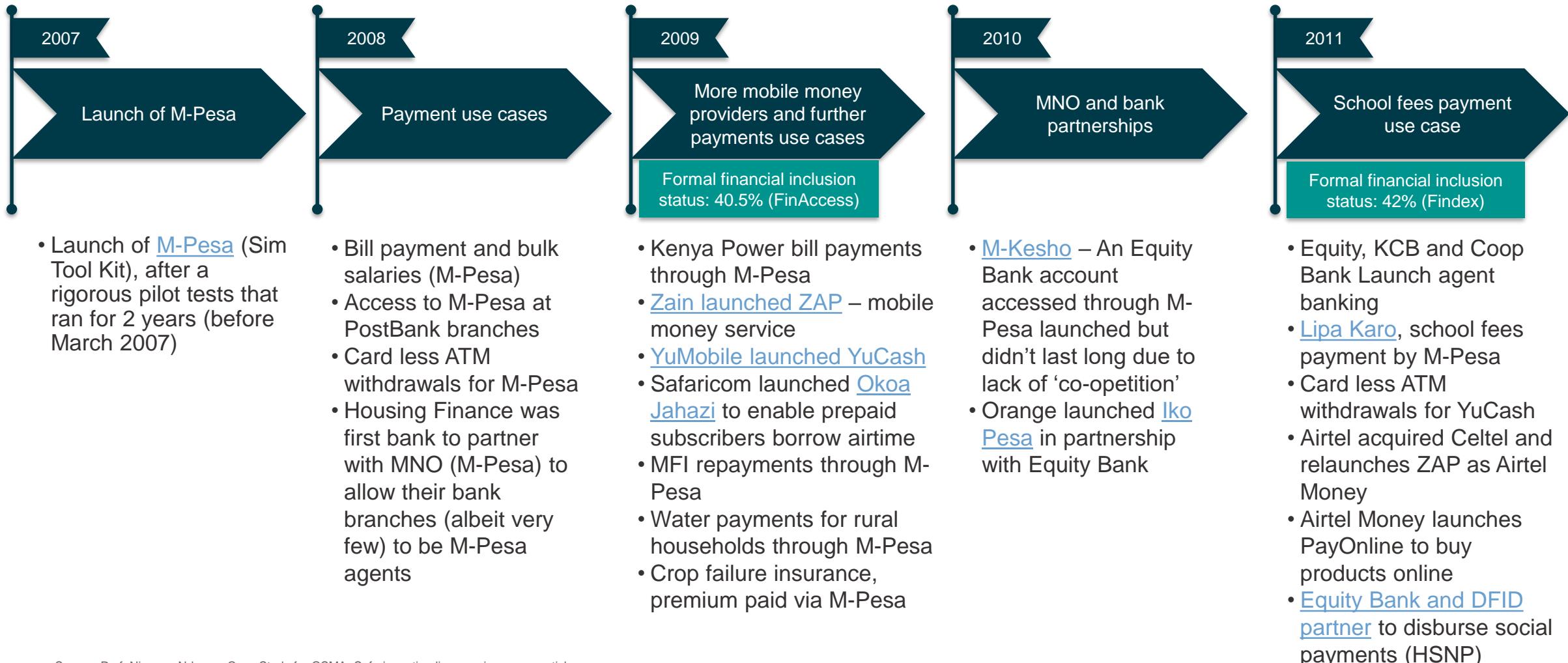
Business model for an agent depends on location of the agent, other business, and number of transactions conducted

Key partners	Key activities	Value proposition	Customer relationships	Customer segments
<ul style="list-style-type: none"><li>Aggregators and agent network managers</li><li>Mobile network operator (MVNO)</li><li>Service providers</li><li>Banks (for MNOs)</li><li>Technology service providers</li></ul>	<ul style="list-style-type: none"><li>Onboarding customers</li><li>Servicing customer requests</li><li>Customer education and support</li><li>Rebalancing</li></ul>	<p><b>Services</b></p> <ul style="list-style-type: none"><li>Accessibility</li><li>Liquidity</li><li>Trust and confidence</li><li>Assistance</li><li>Convenience</li><li>Grow existing business</li></ul> <p><b>System</b></p> <ul style="list-style-type: none"><li>Safe</li><li>Secure</li><li>Reliable</li></ul>	<ul style="list-style-type: none"><li>Dedicated assistance</li><li>Trust and confidence</li><li>Positive word of mouth</li></ul>	<ul style="list-style-type: none"><li>Low- and middle-income demographic, socio-economic, and psychographic segments</li></ul>
<p><b>Cost structure</b></p> <ul style="list-style-type: none"><li>Fixed costs: set up, branding</li><li>Variable costs: Marketing, float rebalancing, staff costs, rentals, and other agents</li></ul>	<p><b>Key resources</b></p> <ul style="list-style-type: none"><li>Financial</li><li>Human</li><li>Physical</li></ul>	<p><b>Revenue streams</b></p> <ul style="list-style-type: none"><li>Transaction commissions</li><li>Complementary sales and increased traffic to outlet</li></ul>	<p><b>Channels</b></p> <ul style="list-style-type: none"><li>Phone</li><li>USSD, STK, SMS, Web, App</li><li>POS</li></ul>	

# Appendix 8: Evolution of product, services, and technology (1/3)



## Mobile-based P2P gradually evolved in other use cases, emergence of bank and MNO partnerships

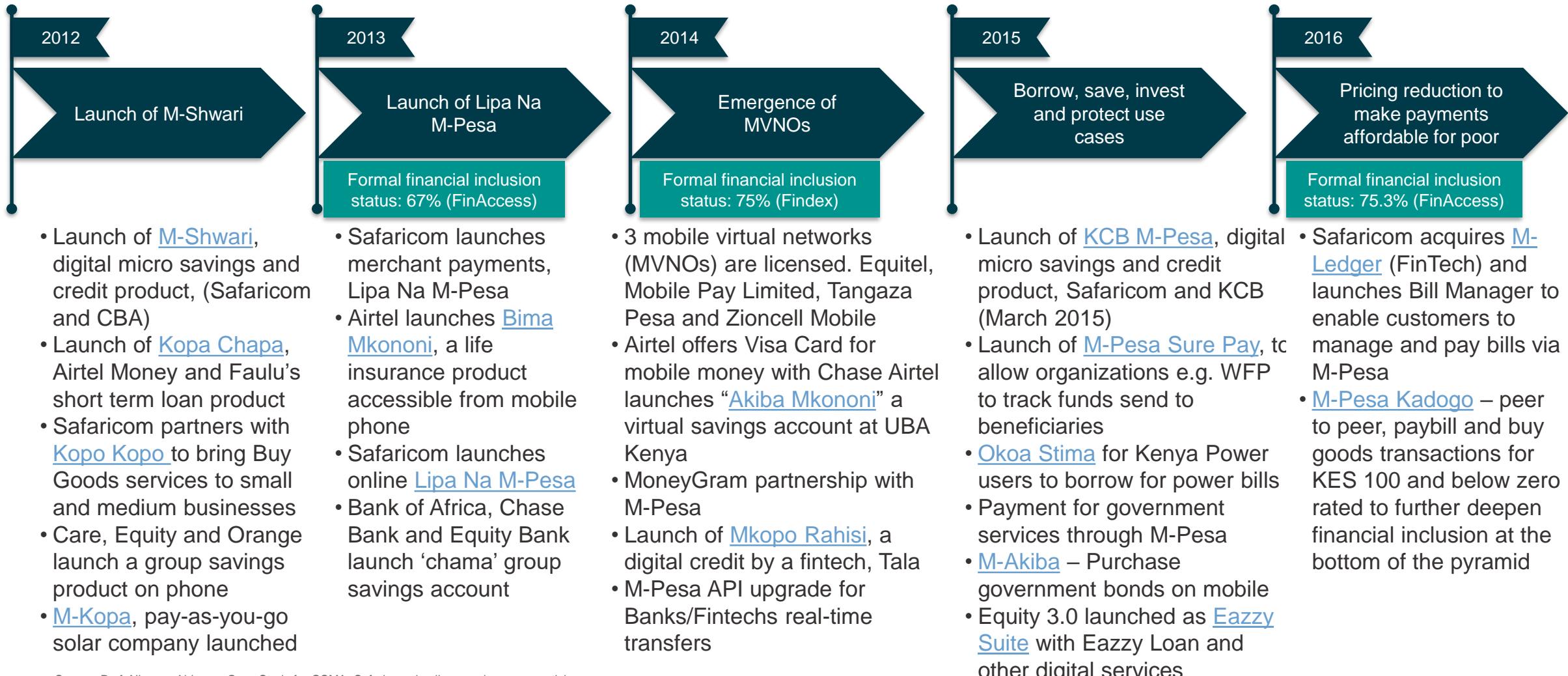


Source: Prof. Njuguna Ndungu, Case Study for GSMA; Safaricom timelines; various news articles

# Appendix 8: Evolution of product, services, and technology (2/3)



## Launch of mobile credit and savings, and merchant payments

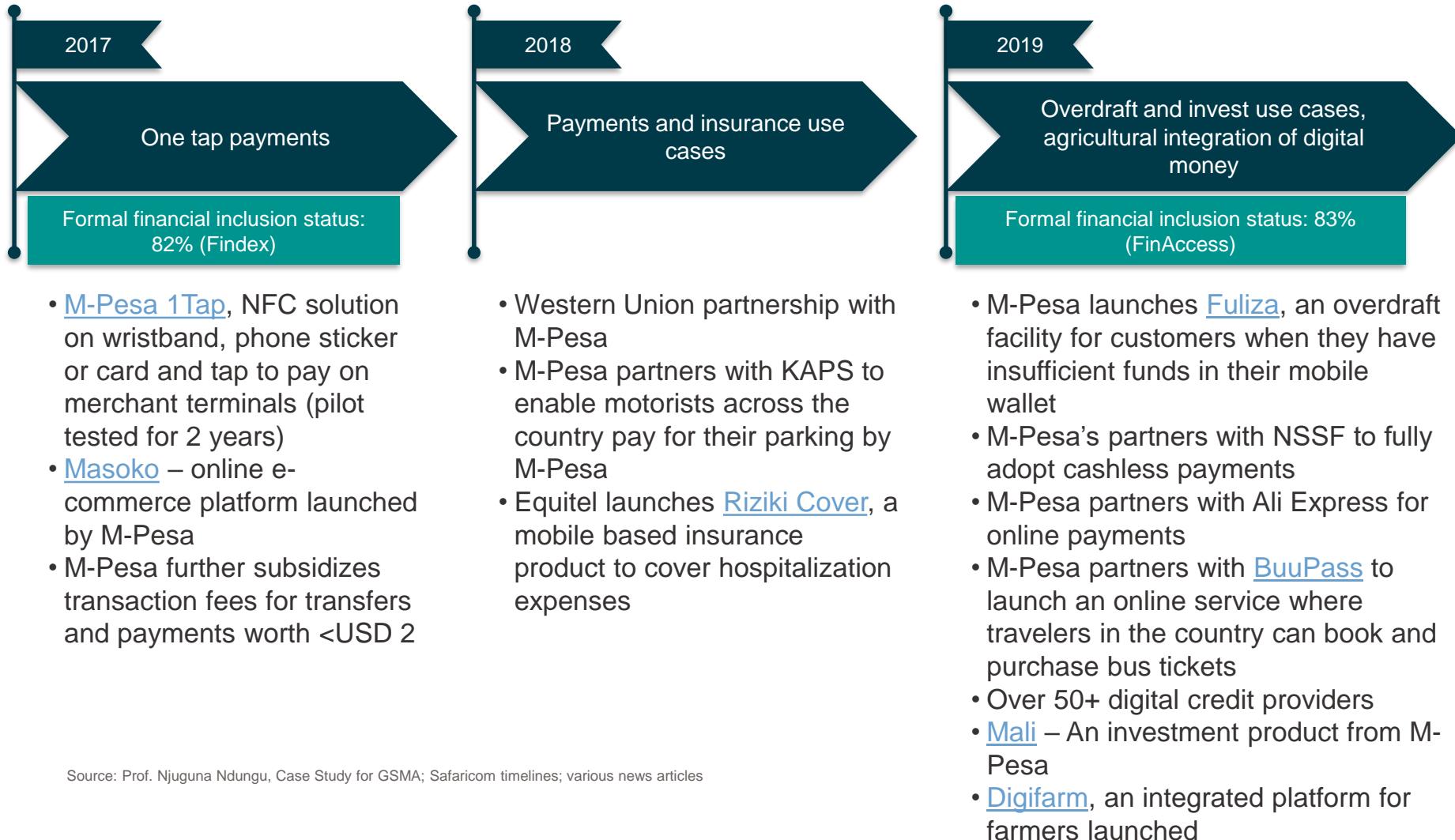


Source: Prof. Njuguna Ndungu, Case Study for GSMA; Safaricom timelines; various news articles



# Appendix 8: Evolution of product, services, and technology (3/3)

## Further evolution of use cases, launch of Fuliza



Source: Prof. Njuguna Ndungu, Case Study for GSMA; Safaricom timelines; various news articles



## Appendix 9: Partnership examples (1/6)

### M-Shwari is digital credit and savings product offered by Safaricom in partnership with NCBA

Partners	<ul style="list-style-type: none"><li>Safaricom, the dominant MNO with the vision of transforming lives</li><li>NCBA (merger between NIC Bank and CBA in 2019) , a commercial bank with a vision of inspiring people to achieve more with their money and thus their lives</li></ul>
Enablers	<ul style="list-style-type: none"><li>Distribution network and subscriber base of Safaricom</li><li>Brand name of both</li><li>Banking license of NCBA</li></ul>
Challenges	<ul style="list-style-type: none"><li>No prior experience of mass market banking for NCBA</li></ul>
Strategic complementarities	<ul style="list-style-type: none"><li>CBA was the trust fund holder for M-Pesa when it began. The bank assisted in creating the framework that was used for the letter of no objection from CBK</li><li>M-Shwari had exclusivity for the first two years</li><li>NCBA rides, through push pull services, on M-Pesa rails for agency banking services</li></ul>
Results	<ul style="list-style-type: none"><li>M-Shwari: 32 million customers (all customers have a bank account with NCBA), USD 4.5 billion disbursed till December 2019, get 80,000-100,000 loan requests every day, average loan size of USD 50, Savings - retained deposits of USD 190 million till December 2019. M-Shwari replicas now in 5 countries</li><li>Fuliza: As of December 2019, over USD 1 bn in overdrafts have been borrowed through Fuliza by M-Pesa customers</li></ul>

Note: There are two differences between a wallet and an account:

- (i) a wallet has a limit to the amount of money that can be stored/transacted through it while an account doesn't
- (ii) one can only access CICO for a wallet through an agent/ATM point

## Appendix 9: Partnership examples (2/6)



### Digifarm is an emerging model to catalyze access to and usage of finance for smallholder farmers in Kenya

Partners	<ul style="list-style-type: none"><li>• Safaricom, the dominant MNO with the vision of transforming lives</li><li>• Other service providers including iProcure (agri distribution), FarmDrive (credit scoring for financial services), Arifu (financial literacy for farmers), iShamba (understanding of financial services)</li></ul>
Enablers	<ul style="list-style-type: none"><li>• Distribution network and subscriber base of Safaricom</li><li>• Lower distribution costs, remove intermediaries</li><li>• Access to financial services and learning</li></ul>
Challenges	<ul style="list-style-type: none"><li>• Focus limited to agriculture sector</li></ul>
Strategic complementarities	<ul style="list-style-type: none"><li>• The integrated nature of the platform and its intensive use of digital data seeks to leverage each partner's strengths, reduce risk for each partner, and drive higher revenues across the partnership</li></ul>
Results	<ul style="list-style-type: none"><li>• DigiFarm launched platform in partnership with 3 early stage value-added services providers – iProcure, FarmDrive, Arifu.</li><li>• Additional partners continue to join the platform, including iCow, iShamba, Kenya Livestock Producers Association, AgroCares, ACRE Africa and Pula</li></ul>



## Appendix 8: Partnership examples (3/6)

### Bloom is instant one-week or one-month tenured loans for Lipa Na M-Pesa merchants offered by Equity Bank

Program	<ul style="list-style-type: none"><li>• Bloom is a credit facility between KES 5,000 to 150,000 for Lipa Na M-Pesa Buy Goods Partners</li><li>• 7 days loan at 2% of the total value of the amount requested</li><li>• 30 days Loan at 7% of the total value of the amount requested</li><li>• A roll over fee of 4.75% on the outstanding loan balance</li></ul>
Partners	<ul style="list-style-type: none"><li>• Safaricom, the dominant MNO with the vision of transforming lives</li><li>• Equity Bank (previously it was offered by Atlas Mara which was taken over by Equity Bank) with a focus on inclusive, innovative, customer-focused financial services</li></ul>
Enablers	<ul style="list-style-type: none"><li>• Merchant base of Safaricom</li><li>• Brand name of both</li></ul>
Challenges	<ul style="list-style-type: none"><li>• Risks of defaults by the merchants</li></ul>
Strategic complementarities	<ul style="list-style-type: none"><li>• Rides on the existing merchant base of Safaricom</li><li>• Deepens Equity Bank's offering</li><li>• Relatively risk free proposition for the bank as the product leverages data on merchants' business volumes</li></ul>
Results	<ul style="list-style-type: none"><li>• Although not very explicitly promoted, over 200,000 merchants have borrowed using Bloom</li></ul>

## Appendix 8: Partnership examples (4/6)



### Equitel, an MVNO riding on Airtel's infrastructure is the strategic response of Equity to Safaricom's dominance in mobile network operations

Partners	<ul style="list-style-type: none"><li>• Finserve Africa, a subsidiary of Equity Bank with a vision of inclusive, innovative, customer-focused financial services</li><li>• Airtel, an MNO with a vision of enriching the lives of customers through an exceptional experience</li></ul>
Enablers	<ul style="list-style-type: none"><li>• Mass market, technology, and innovation focus of Equity Bank</li><li>• Extensive infrastructure of Airtel</li></ul>
Challenges	<ul style="list-style-type: none"><li>• Compete against dominant player</li><li>• Enhance the utilization of Airtel's infrastructure</li></ul>
Strategic complementarities	<ul style="list-style-type: none"><li>• Airtel is the business service provider for Equitel, the mobile virtual network operator (MVNO)</li><li>• Rides on the existing and robust customer base of Equity Bank and deepen the bank's offering to its customers</li><li>• Increased utility and capacity of existing infrastructure of Airtel</li></ul>
Results	<ul style="list-style-type: none"><li>• Over 2 million Equitel subscribers</li><li>• Equitel's market share in the value of mobile money transactions is 26%</li><li>• Equitel's market share in mobile commerce is 33%</li></ul>



## Appendix 8: Partnership examples (5/6)

### Equity's approach to social payments through card and POS device showcases the business case on government-to-persons payment for Hunger Safety Net Program

Program	<ul style="list-style-type: none"><li>The Hunger Safety Net Program (HSNP) in Kenya is aimed at reducing poverty, food insecurity and malnutrition, and promoting asset retention and accumulation. The program under the Ministry of Labour and Social Protection is provided for under the National Social Protection Policy.</li></ul>
Partners	<ul style="list-style-type: none"><li>Equity Bank with a focus on inclusive, innovative, customer-focused financial services</li><li>Government of Kenya with a focus on efficacy in government-to-persons payment</li></ul>
Enablers	<ul style="list-style-type: none"><li>Brand name and mass market focus of the bank</li><li>Technology and innovation focus</li><li>Need-based solution</li><li>Ultra poor focus</li></ul>
Challenges	<ul style="list-style-type: none"><li>Limited outreach in remote and ultra rural areas</li><li>Cost of transfers should make economic sense</li></ul>
Strategic complementarities	<ul style="list-style-type: none"><li>An expansion of agency banking access points in remote villages in Northern Kenya resulted in broadened choice for customers and program penetration</li></ul>
Results	<ul style="list-style-type: none"><li>Administered in two phases, Equity Bank was successful in reaching the target customers through a branchless banking network and helped ensure the deepening of access to financial services for residents in the marginalized areas</li><li>604,698 customers in remote arid and semi arid areas</li><li>Over 100,000 households reached</li></ul>



## Appendix 8: Partnership examples (6/6)

**Stawi is a multi-bank partnership to leverage digital infrastructure to enhance access to loans, savings, and financial management tools for the micro, small, and medium enterprises**

Program	<ul style="list-style-type: none"><li>• Stawi is a solution designed for all entrepreneurs to improve access to credit aimed at growing or improving their business. Through Stawi entrepreneurs can access a digital account for their business operations as they can manage all payments and money made from their business.</li></ul>
Partners	<ul style="list-style-type: none"><li>• NCBA , a commercial bank with a vision of inspiring people to achieve more with their money and thus their lives</li><li>• Cooperative Bank, KCB, and Diamond Trust Bank with a focus on enhancing outreach and scale in mass market banking, and leveraging infrastructure to grow the business</li></ul>
Enablers	<ul style="list-style-type: none"><li>• Stable and respected financial services brands</li><li>• Outreach</li><li>• Partnerships</li><li>• Branch networks</li></ul>
Challenges	<ul style="list-style-type: none"><li>• Underutilized infrastructure</li><li>• Limited success in MSME banking</li><li>• Threat of fintechs</li></ul>
Strategic complementarities	<ul style="list-style-type: none"><li>• Market place approach to financial services for the entrepreneurs</li><li>• Use of common platform to increase outreach</li></ul>
Results	<ul style="list-style-type: none"><li>• SMEs/MSMEs can access mobile based financing of up to KES 250,000 paid straight into their mobile money tills or bank accounts and repayable over a maximum period of 1 year</li><li>• As at the end of December 2019, USD 1.9 million was disbursed to 94,000 micro, small, and medium enterprise owners</li></ul>



## Appendix 10: Government support to rural CICO (1/2)

Government may support rural CICO through digital G2P programs, incentives to beneficiaries, agents, or providers

Incentive or support	Recipient	Form	Impact
Additional allocation to program beneficiary	Beneficiary	Additional allocation per transfer	The additional allocation of per transfer to beneficiary results in increase in financially-included populations, reduction of leakages, improved operational efficiencies, and choice to the customer
Pay a lumpsum grant up front to cover payment service provider's costs of expanding to new areas	Payment service provider	Lumpsum in form of investments	Encourage payment service providers to expand to rural areas. Also, they may realize cross sales value proposition in additional outreach, deposits, fees, etc.
Pay payment service provider for new accounts opened. Depending on business model, payment service providers may realize additional value through the resulting new revenues from deposits held	Payment service provider	Additional funds	
Higher commissions to the payment service provider to recover the additional costs of reaching more remote customers	Payment service provider	Additional commissions per transfer	
Part funding of program costs such as devices to the provider to expand outreach in rural areas	Payment service provider	Lumpsum in form of investments into devices	
Investment in infrastructure such as network, power, road etc.	Not applicable	Capital expenditure	Enhance means to reach out to rural customers
Additional allocation to develop rural digital ecosystems	Payment service provider, government/ utility companies	Managed grant	Increase in use cases to use digital money for the beneficiaries hence less cost of cash to all stakeholders



# Appendix 10: Government support to rural CICO (2/2)

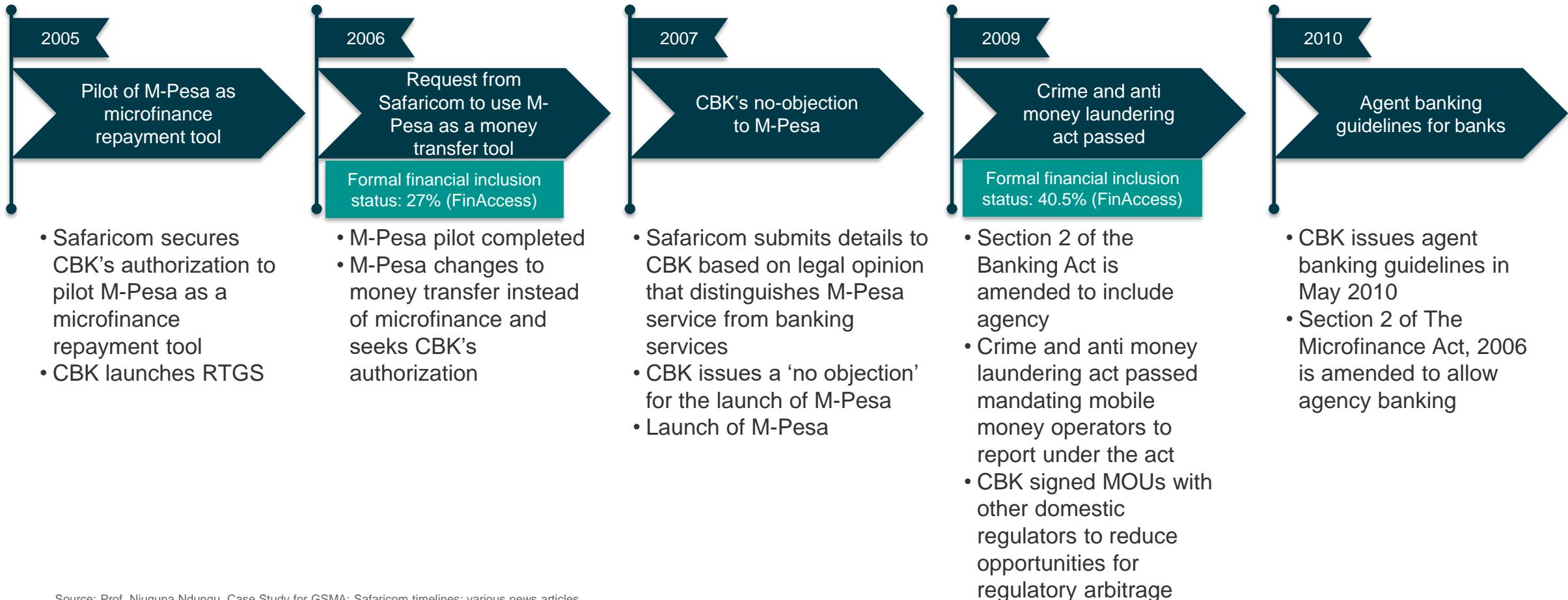
The support may take various forms as explained below:

Things to pay for	Pay PSP	Pay beneficiaries	Ministry / Third party
<b>Distribution / cash-out fee</b>	No cash out fees for a limited number of transactions in a defined time period thereby making cash-out 'free' or cheaper to recipients	Top-up transfer amount with cash-out fee to enable them to access full benefit	N/A
<b>Reach of beneficiaries / transport to access point</b>	Tiered remuneration structures for PSPs serving customers (tiering to be done basis remoteness as measured in distance from highways and population density)	Use tiered travel rebate basis the distance of recipient's location from the nearest access point	N/A
<b>Account opening / KYC</b>	Flat fee for every new qualifying account opened spread across first six months of usage; banks can be encouraged to waive fees on account of potential deposit mobilization	Flat amount at first disbursement or spread across payments	Support recipients with account opening
<b>Education and training of beneficiaries</b>	Tiered commissions for PSPs educating customers (tiering to be done basis remoteness as measured in distance from highways and population density)	Compensate customer for their opportunity cost and travel costs	Educate recipients yourself or through third parties
<b>Technological requirements and devices</b>	For acquisition of service terminals based on meeting demand and adapted to local context such as use of solar-powered POS devices	Provide mobile phones or other electronic devices to recipients	N/A
<b>Customer support and redress</b>	Initial set up costs for customer support and redress	N/A	Train recipients on how to access support and grievance redressal
<b>Merchant discount rate or purchase fees</b>	No merchant fees to be deducted from merchant when they make digital sale of subsidized goods	No customer fees to be deducted from merchant when they make digital purchase of subsidized goods	N/A



# Appendix 11: Evolution of regulations (1/3)

## Emergence of M-pesa and regulations on agency banking for banks (2005-10)

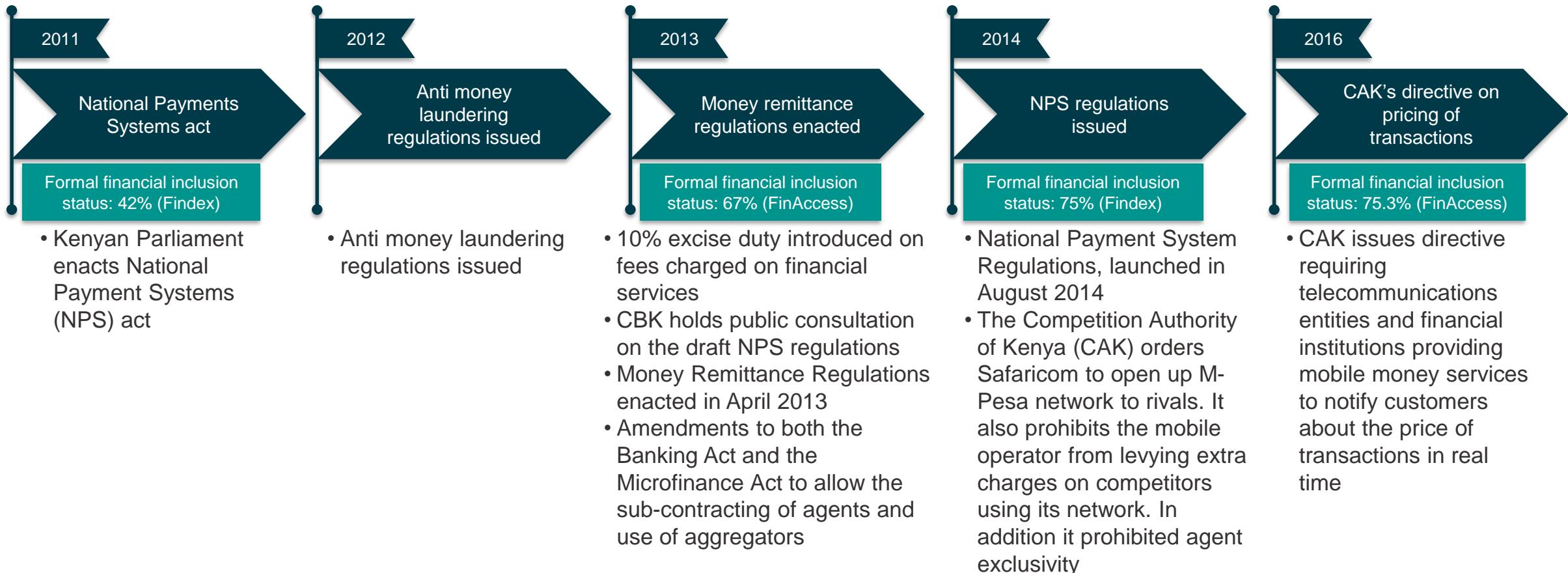


Source: Prof. Njuguna Ndungu, Case Study for GSMA; Safaricom timelines; various news articles



# Appendix 11: Evolution of regulations (2/3)

## National payment systems act and regulations (2011-16)

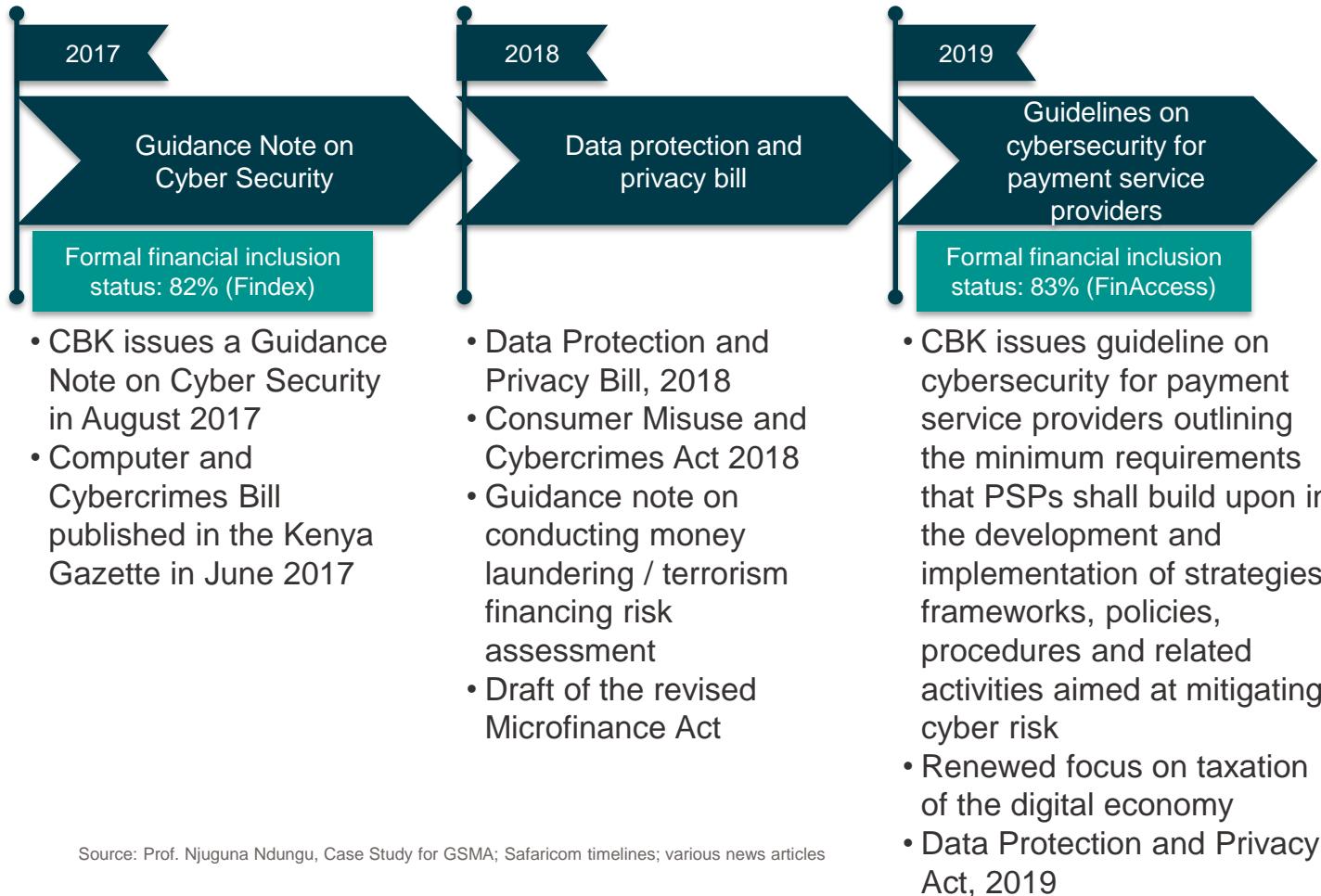


Source: Prof. Njuguna Ndungu, Case Study for GSMA; Safaricom timelines; various news articles



## Appendix 11: Evolution of regulations (3/3)

Move towards a principle-based regulation, forward-looking regulatory interventions have started to emerge



Source: Prof. Njuguna Ndungu, Case Study for GSMA; Safaricom timelines; various news articles

# Thank you

To learn more, please visit  
[www.cgap.org](http://www.cgap.org)