

Cash-in/cash-out agent networks:

Reaching the last mile in financial inclusion

Introduction and key highlights



BILL & MELINDA GATES foundation While the number of unbanked adults has decreased by 30%+ between 2011 and 2017, 1.7Bn people remain unbanked today and much progress is still required to achieve universal financial access by 2020 (as set by the World Bank).

Focusing on this ambitious agenda, The Boston Consulting Group (BCG) has worked in partnership with the Bill & Melinda Gates Foundation to understand the challenges and key requirements for the expansion of cash-in/ cash-out (CICO) services in emerging markets as a key driver of financial inclusion.

The documents presented on this microsite highlight key findings from this work, including:

- The role of CICO services in driving financial inclusion and the challenges to delivering CICO access in low income rural areas
- The state of CICO access in specific markets<sup>1</sup>, and the opportunity for new agent allocation to fill these coverage gaps
- The range of potential interventions in particular, economic incentives to catalyze CICO services expansion
- Deep-dives focused on specific markets: Nigeria, Indonesia

# t © 2019 by Boston Consulting Group. All rights reserv

## CICO study draws on a range of research and analyses...



25+ DFS<sup>1</sup>
providers
engaged
(including
banks, MNOs,
fintech,
ecommerce)



200+ agent interviewed in 6 countries (India, Indonesia Bangladesh, Nigeria, Kenya, Tanzania)



40+ experts
consulted in
financial
inclusion,
banking,
telecom, FMCG
distribution, etc.



65+ case studies of economic interventions to drive rural expansion



In-depth geospatial analysis across 7 countries to size the CICO coverage challenge and opportunity

# vright © 2019 by Boston Consulting Group. All rights reserve

## ... with a focus on four key topic areas



Role of CICO in financial inclusion

Why is CICO important for financial inclusion?

What defines a successful CICO agent network?



Sizing the CICO access challenge

What is the size of the CICO coverage gap in key markets?



Exploring potential interventions for CICO expansion

What are challenges/ root causes to CICO expansion today?

What are potential interventions to catalyze CICO expansion?



Path forward for country application

What does the path forward look like?

How can we think about developing market-specific CICO strategies?

What roles should key stakeholders play?

## This document lays out an overview of the research; additional materials on the website provide further detail



Overview & key highlights from the research

This document

Role of CICO for financial inclusion

Sizing the CICO access challenge





Exploring potential interventions



Illustrative country deep-dives



Copyright © 2019 by Boston Consulting Group. All rights reserved

## Executive summary (I/II)

Cash-in/ cash-out (CICO) points (e.g., ATMs, bank branches, agents) play a critical role in the transition from cash-based to fully digital financial systems, and thus financial inclusion. CICO agents in particular are the most prominent and high potential channel to drive digital financial services (DFS) uptake and usage in developing markets

- Agents provide an easy, trusted "on-ramp" for customers to more sophisticated financial services over time
- The agent model is also typically more efficient and operationally scalable compared to banks and ATMs, and so has high potential to deliver coverage and access in low-income and rural areas in developing markets

The CICO agent model can be an attractive distribution channel for providers and agents, and is likely to expand organically in densely populated areas (i.e., urban and densely populated rural areas with sufficient transaction volume and infrastructure connectivity). In previous research, we also identified that some less densely populated regions that have economic points of interest like marketplaces could also support viable agents ("rural oases"). However, this model is likely to face viability challenges in more remote rural geographies (i.e., "rural frontiers")

Across 7 research countries<sup>1</sup>, ~465M people still lack CICO access within 5kms of their homes today<sup>2</sup>; approximately 85% of this coverage gap is located in rural areas (across dense rural, rural oases and rural frontiers)

Geospatial analysis suggests that ~500K new active agents would be required to deliver universal CICO access across these 7 countries, with a vast majority (90%) located in rural areas. However, it is likely that ~2/3 of total new agents would be unviable - due to either economic challenges (e.g., limited local consumer base), operational challenges (e.g., far distance away from bank branches or rebalancing points) or both

• Geospatial analysis highlights areas where new agents might face different types of challenges, and thus helps identify what type of external support (e.g., direct incentives for economic challenges, or infrastructure developments for operational challenges) might be most needed

Achieving universal financial inclusion objectives and catalyzing remote rural CICO expansion will require a broad range of interventions from government and inclusion stakeholders

• Interventions may range from direct economic incentives to boost viability in the near-term to longer-term regulatory reform and investments in physical infrastructure

<sup>1.</sup> Bangladesh, India, Indonesia, Pakistan, Kenya, Tanzania, Uganda (deep dive on Nigeria anticipated in 2020); 2. For India, the definition of access was revised to "access to a CICO point 6. within 1km in urban areas and access to a CICO point within 2.5 kms in rural areas" - based on local stakeholders' input

## Executive summary (II/II)

A global 'landscaping' of supply-side economic incentives identified 12 potential levers to catalyze expansion of CICO services for the purpose of financial inclusion. These levers fall into three main categories:

- Inclusion guidelines (e.g., Coverage targets, inclusion mandates) to "push" or prompt providers' expansion into rural areas
- Direct profitability improvements (e.g., Favorable contracts, income guarantees, price guidelines, discounted inputs) to increase revenues or cut costs and improve the economics of providers and/or agents at least in the near-term
- Demand generation (e.g., Creation of new use cases for DFS, end-user consumption subsidies) to create a "pull" for providers and agents CICO/ DFS services; and ensure viable demand and revenues even after the incentives has been removed

Several key design principles and best practices for incentives also emerged from the research, including:

- Building incentives as a combination/ sequence of 'push' and 'pull' levers to catalyze both near-term expansion of CICO networks while ensuring their longer-term economic viability
- Establishing new government-provider collaboration models to ensure that incentives are operationally feasible; cover providers' and agents' actual costs on the ground; and are aligned with providers' strategic priorities
- Distributing incentives via providers to reach scale, while ensuring they are designed for the needs/ habits of agents and consumers
- Allowing for multi-year investments, as interventions will typically take longer to be successful than designed for

#### Looking ahead:

- Incentive selection and design will require considering and analyzing **countries' local contexts** and **the specific root causes** of CICO expansion/improvement challenges (e.g., see Nigeria and Indonesia deep-dives)
- It will also be **critical to engage stakeholders across sectors** (e.g., government, financial services providers, philanthropies/ NGOs) to define and implement priorities for CICO expansion/ improvement in order to achieve meaningful progress for financial inclusion





Role of CICO in financial inclusion

Why is CICO important for financial inclusion?

What defines a successful CICO agent network?



Sizing the CICO access challenge

What is the size of the CICO coverage gap in key markets?



Exploring potential interventions

What are challenges/ root causes to CICO expansion today?

What are potential interventions to catalyze CICO expansion?



Path forward & country application

What does the path forward look like?

How can we think about developing market-specific CICO strategies?

What roles should key stakeholders play?

opyright © 2019 by Boston Consulting Group. All rights reserved

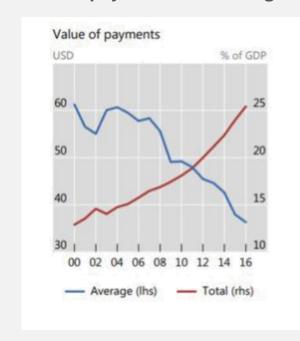
Cash-in/cash-out (CICO) services can be delivered via multiple channels: bank branches, ATMs and agents

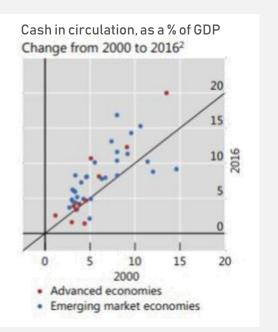
CICO services play a critical role in the transition from cash-based to fully digital financial systems, and thus financial inclusion. Indeed, in most emerging markets, customers who want to use DFS can only do so if they're able to convert cash into e-money (and back again), as needed

### Growth of DFS does not eliminate need for cash

### Card payments increasing

### Cash demand increasing





Digital (card) payment and cash transactions have been growing side-by-side in most countries around the world

In emerging markets in particular, CICO infrastructure has expanded, and actually enabled the initial DFS uptake and use

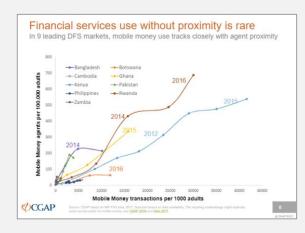
# right © 2019 by Boston Consulting Group. All rights reserv

## Additional studies across markets go further, and show that CICO drives initial expansion of DFS uptake and use



## Across the world, DFS/ mobile money usage tracks closely with proximity to agents

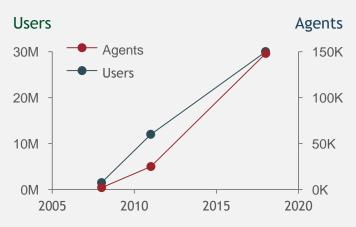
 CGAP research shows that across markets in Africa and Asia, agent proximity to customers has been important for the uptake and usage of mobile money





## **Example:** Growth in m-Pesa agents and users followed similar trajectories in Kenya

- m-Pesa grew very rapidly to become the largest agent network & mobile money platform in Kenya
- From ~2K agents and ~1.5M users in 2008, it had spread to ~148K agents and ~30M users in 2018





## **Example:** Expansion of BC's<sup>1</sup> caused an increase in uptake and use of accounts and FS

- In 2018, 31.5M Mexican adults were using banking correspondents' services, an increase of 49% vs. 2012
  - In rural areas, that number was 8.1M adults up from 4M in 2012 (a 2x increase)
- The total number of active "Banamex Transfer" mobile accounts<sup>2</sup> grew from 2.75M in 2014 to 10M+ in 2018
- The number and amount of savings transactions managed by correspondents grew ~6-7x between 2013 and 2018 to 23M transactions or \$30M monthly

<sup>1.</sup> BC: Banking Correspondents = agents. 2. Banamex Transfer accounts are simplified bank accounts that allow users to use their mobile phones to perform simple and secure bank transactions by phone.

Sources: Measuring the Impact of Bank Correspondents on Financial Inclusion in Mexico (National Banking Commission, 2018); Payments are a-changin' but cash still rules (BIS, March 2018), The long-run poverty 10 and gender impacts of mobile money (Suri and Jack, 2016); Proximity Matters: Five Case Studies in Closing the CICO Gap (CGAP, 2018), How Mobile Money is Spreading (The Economist, 2018)

CICO agent networks in particular are the most prominent and high potential form to drive DFS uptake and usage in developing markets especially in rural areas



CICO agents enable the initial adoption of DFS, by providing an easy way for customers to convert cash into e-money (and back again), as needed



They also establish a foundational layer of trust with customers in rural areas, thanks to their high touch/ inperson model - and provide an "on-ramp" to more sophisticated DFS over time



The agent model also offers a more economically efficient and operationally scalable channel (vs. bank branches and ATMs) - and so has potential to expand coverage and access in low income and rural areas



Ideally, through agents' contacts with customers, providers could also gain better understanding of customer needs across geographic areas and income segments - to continuously develop and improve their FS/ DFS offerings to meet the needs of customers

CICO agents are key to drive financial inclusion, particularly in nearterm, until digital money ecosystems are more fully developed

# right © 2019 by Boston Copsulting Group All rights reserv

## A successful CICO agent model addresses the needs of providers, agents, and consumers to achieve universal access to (digital) financial services



Vision

Provide a convenient, affordable, and trusted channel for last-mile distribution of digital financial services, and in particular cash-in/cash-out services, for the purpose of financial inclusion<sup>1</sup>



Goals

#### Access

Proximity & density of agents

Equity of access

- UtilizationAffordability & reliability of services
- Relevance of use cases

#### Sustainability

 Viability of business & operating models over time



### Stakeholder needs

P R O V I D E

Develop quality, reliable **products** that meet consumer needs/ preferences

Employ **economically viable** business models

Employ effective/efficient operating models, fit to local context, to deliver universal access

Are **well-trained** to inform consumers on FS/ DFS<sup>2</sup> options

Provide **quality service** to consumers, including carrying sufficient cash and e-money float balances at any time

Charge **fair prices**, that still allow them to earn **viable** profits

Are **informed/ educated** on DFS<sup>2</sup>; and have resources to ask questions/submit complaints

Are **protected** from unfair business practices

**Demand** and **use** DFS—with services accessible for all geographies, income levels, age groups, genders



Economic incentives
Focus of this work

Innovation

**Partnerships** 

Data

Regulations

Infrastructure

## Existing resources and ongoing work span all main CICO-related topics

Non-exhaustive



#### Vision

CGAP (2019): Principles, Practices, Policies, and Regulations to Support Rural Access to FS CGAP (2018): Proximity Matters: 5 Case Studies in Closing the CICO Gap

GSMA (2015): Critical Factors to Create Successful Mobile Money Agents in Rural Frontier



### Stakeholder needs

#### **Providers**

IFC (2019): A New Banking Model for Africa: Lessons on Digitization from 4 Years of Operation BMGF (2013): Fighting poverty, profitably:

Transforming the economics of payments

**GSMA (2011):** Handbook for MNOs: Building, Incentivizing & Managing Agent Networks

#### Agents

**GSMA (2018):** Distribution 2.0: The future of mobile money agent distribution networks

MicroSave/ Helix (2013-2017): Agent Network Accelerator Research across countries

IFC (2016): Breaking Free of the Branch: Alternative Delivery Channels in Sub-Sah. Africa

#### Consumers/ Demand

IDEO (2018-): Improving women's access & engagement with DFS

Dalberg & Partners (2016-): The Human Account - rigorous data & segmentation to understand people's financial lives

Financial Diaries (2013-2017) in Africa



### **Enablers**

#### **Economic incentives**

BCG (2019): CICO Incentives Playbook & case study compendium This work

BCG (2018-19): Deep dive on CICO economics. incl. agent field research

#### Innovation

IDEO (ongoing): **Human-Centered** Design to accelerate growth of m-money

#### **Partnerships**

**TBD** 

Global Findex Report

Financial Inclusion **Tracker Surveys** 

FinAccess/ Access to FS Surveys

#### Data

Finclusion reports

FinScope Surveys

12I fspmaps

## MIX geospatial maps

CGAP/ Flowminder geospatial studies

World Bank Global **Payment Survey** 

**GSMA Mobile Money Adoption Survey** 

IMF Fin. Access Survey

#### Regulations

**BMGF (2019):** Global e-money regulatory reference guide

**EPAR at UoW (2018):** Impact of Regulations on Cash-In and Cash-Out Networks

#### Infrastructure

GSMA: Country reports mobile internet connectivity index

Multiple data sources today - however lack of systematic data repository/ approach; common CICO measurement framework; or ways to track CICO utilization & sustainability over time





## Role of CICO in financial inclusion

Why is CICO important for financial inclusion?

What defines a successful CICO agent network?



## Sizing the CICO access challenge

What is the size of the CICO coverage gap in key markets?



## Exploring potential interventions

What are challenges/ root causes to CICO expansion today?

What are potential interventions to catalyze CICO expansion?



## Path forward & country application

What does the path forward look like?

How can we think about developing market-specific CICO strategies?

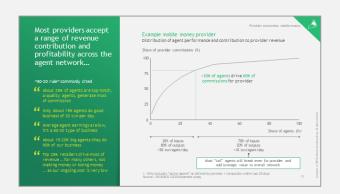
What roles should key stakeholders play?

## While existing CICO models can be attractive for providers and agents and are likely to expand in urban areas...



## At-scale providers can achieve viable CICO business models

- ~20-30% of agents (presumably in dense, urban areas) drive 80% of commissions
- Most existing "tail" agents (the other ~70-80%) still break even for provider and add strategic value to overall network





## For individual agents, CICO/ DFS can be attractive when transaction volumes are high

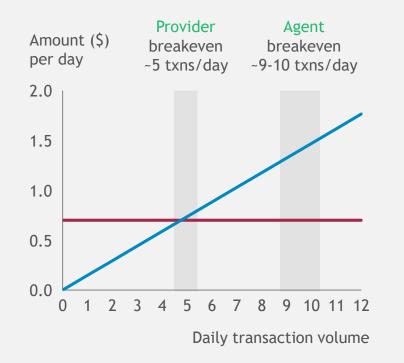
- ... Especially if practiced as an add-on business in addition to main retail activity
- Across observed markets, agents who conduct ~30-50 transactions/ day can generate profits of ~\$150/ month, exceeding per capita GNI



## For most models, providers aim for each new agent to be viable on their own - a dynamic that drives new agent location decisions and inhibits rural expansion

When agents are liquid and profitable, we do well. When they are not, we don't do well either

Potential agent earnings is our key consideration for a new agent location



## Rural breakeven analysis

In most models, provider breakeven point is lower than agent breakeven point

Provider Fixed Cost (Rural)
Provider Marginal Revenue

Provider marginal revenue = Transaction Revenue - Commissions to Agent & Intermediary Source: 2018 BCG CICO Economics study, BCG analysis

# nvright © 2019 by Boston Consulting Group. All rights reserved.

## Economic and operational conditions likely to vary and affect CICO expansion across geographic segments

Hypothesis: The more "rural" the region, the more agents & providers will struggle to be profitable and organic CICO expansion will be unlikely (and require external intervention)



Urban



Peri-urban/ Dense rural



Rural "oasis"



Rural "frontier"

Description

Large, densely populated with very high infrastructure connectivity and commercial activity

Less densely populated, slightly less infrastructure connectivity and commercial activity Smaller, sparsely populated, remote, but with points of interest that drive commercial activity

Very sparsely populated, very remote, and no established commercial activity

Implications for CICO viability

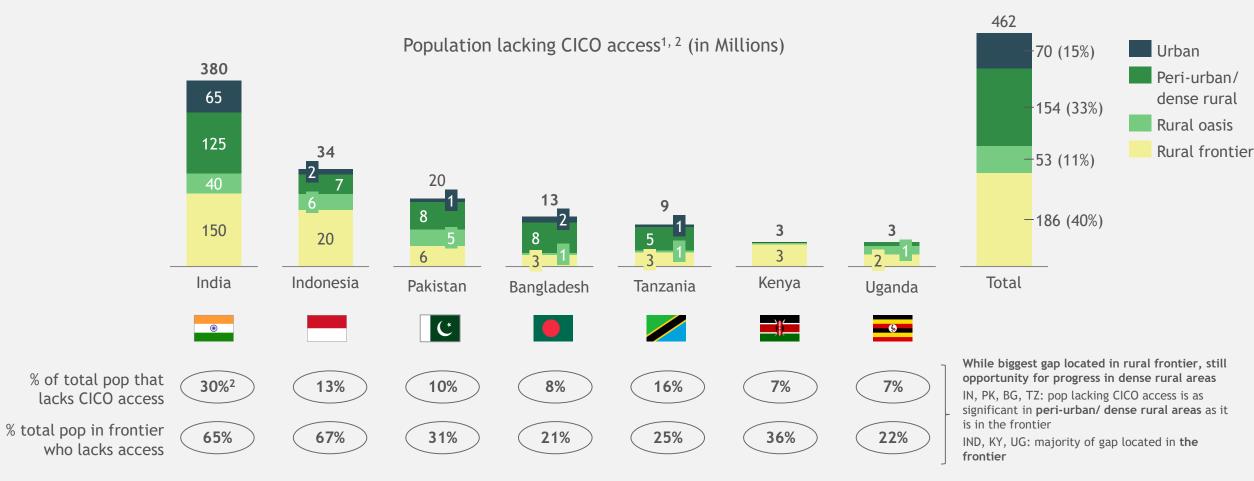
Economically and operationally viable

Economically and operationally viable

Likely to be economically viable; potential operational challenges based on access to infrastructure

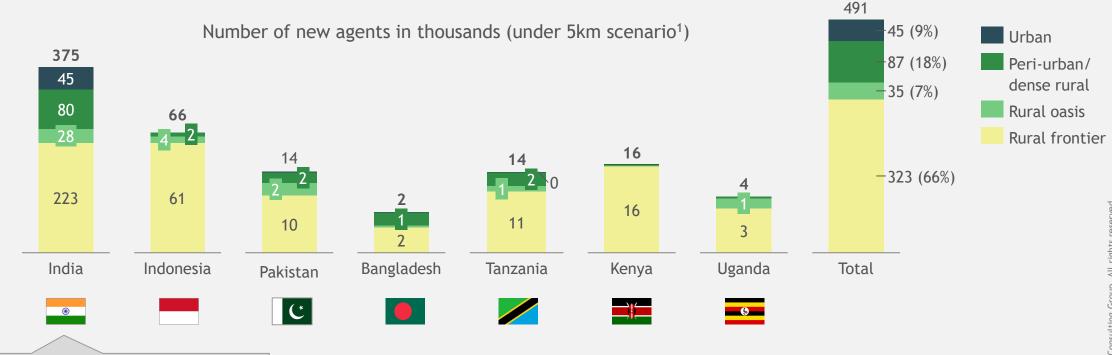
Significant challenges to economic and operational viability

# Today, ~465M people lack CICO access across 7 research countries; with vast majority located in rural areas



<sup>1.</sup> Defined as population located more than 5km from a CICO point (bank branch, ATM, agent, etc.) based on Fraym Financial Inclusion Insights survey; 2. For India, the definition of access was revised to "access to a CICO point within 1km in urban areas and access to a CICO point within 2.5 kms in rural areas" - based on local stakeholders' input. Data sources: India: Esri bank and ATM POI data, IPPB outlets data, BCs and CSCs data web scraped from IBA BC registry, and individual SLBCs and banks websites, includes 630K+ CICO points geo-mapped across all states; Bangladesh: FSP financial map; Indonesia: Web scraped locations of BNI, BTPN, Mandiri, BCA agents; BRI agents not included due to data availability; All: Landscan - population; Fraym CICO layer based on FII consumer survey data; Esri bank and ATM POI; FSP financial map; BCG analysis

## ~500K new active agents needed to deliver universal CICO access across focus countries; 90% in rural areas



E.g., In India, adjusting for dormancy rates of ~30% in urban areas and ~40% in rural ones, total need for new agent could reach ~615K new agents

<sup>1.</sup> For India specifically, the definition of access was revised to "access to a CICO point within 1km in urban areas and access to a CICO point within 2.5 kms in rural areas" - based on local stakeholders' input. Data sources: India: Esri bank and ATM POI data, IPPB outlets data, BCs and CSCs data web scrapped from IBA BC registry, and individual SLBCs and banks websites, includes 630K+ CICO points geo-mapped across all states; Bangladesh: I2I/ FSP maps; Indonesia: Agent coverage based on web scrapped locations of BNI, BTPN, Mandiri, BCA agents; BRI not included due to data availability. All: Landscan - population; Fraym CICO layer; Esri bank and ATM POI; I2I/ FSP maps; BCG analysis

# yright © 2019 by Boston Consulting Group. All rights reserve

## Due to variety of challenges, ~2/3 of new agents needed likely to be unviable (economically and/or operationally)

Agent viability analysis

Population

> minimum viable population<sup>1</sup>

< minimum viable population<sup>1</sup> ~32% (~155K)

new agents likely to be viable

~35% (~174K)

new agents likely to be economically <u>un</u>viable e.g., lack access to sufficient population to serve

new agents likely to be both operationally and economically unviable

~26% (~126K)

~7% (~36K)

new agents likely to be

operationally unviable, e.g.,

lack adequate access to banks

Within thresholds

Outside of thresholds

Access to infrastructure<sup>2</sup>

About 1/3 of all new agents are likely to be both economically and operationally viable

About 1/3 (35%) of new agents are likely to be economically unviable and require supply-side incentives (e.g., subsidy)

 Population in local catchment area is less than the minimum required for a non-dedicated DFS agent to achieve sufficient profitability<sup>1</sup>



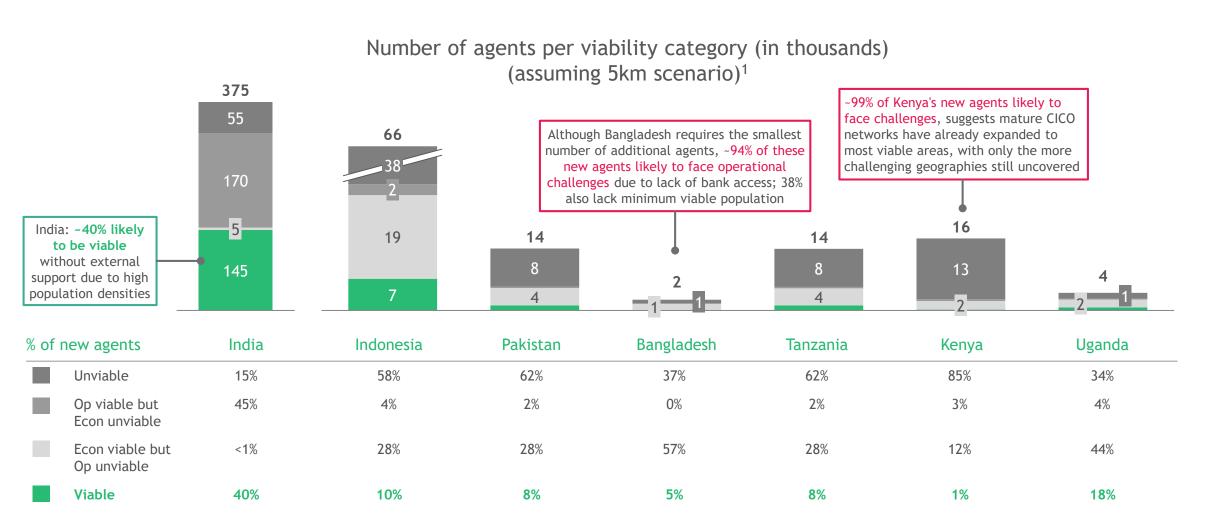
The last 1/3 of new agents is likely to be operationally <u>un</u>viable and would likely need infrastructure investments and/ or operating model innovation

- Agent is located more than 20km from a bank, which significantly limits liquidity management capabilities
- Distance from bank branch typically observed as the 'binding constraint' for operational viability (as compared to mobile connectivity or access to roads)

<sup>1.</sup> Minimum viable (desired) population defined by country based on desired transaction levels to achieve target profitability (based on BCG CICO Economics study in markets, 2018) - incorporates field research on CICO business economics and commission structure for a non-dedicated DFS agent as well as assumptions on proportion of adult DFS users within the country. 2. Access to infrastructure "within thresholds" defined as access to a bank branch within 20kms; access to a cell tower within 30 kms; and access to a road within 5kms Source: Landscan 2017; Esri Point of Interest; Helix Agent Network Accelerator Surveys; BCG CICO Economics Study

# Copyright © 2019 by Boston Consulting Group. All rights reserved

## Detail: Share of unviable agents varies by country, driven by local population size/ density and existing infrastructure in the frontier







## Role of CICO in financial inclusion

Why is CICO important for financial inclusion?

What defines a successful CICO agent network?



## Sizing the CICO access challenge

What is the size of the CICO coverage gap in key markets?



## Exploring potential interventions

What are challenges/ root causes to CICO expansion today?

What are potential interventions to catalyze CICO expansion?



## Path forward & country application

What does the path forward look like?

How can we think about developing market-specific CICO strategies?

What roles should key stakeholders play?

# wright © 2019 by Boston Consulting Group. All rights reserved.

## Range of challenges stand in the way of expansion and viability of CICO agent networks in rural areas



Economics for providers & agents

Investment capacity, revenue streams, transaction volume, fee structure, setup/operating costs - at both provider- and agent-levels



**Regulatory environment** 

Characteristics of regulatory or policy frameworks - enabling vs. inhibiting achievement of viable business/ operating models



Operational complexity

Availability and adoption of technologies/ business processes to ensure efficient and scalable operations



**Industry dynamics** 

Capability/ capacity of individual providers to achieve rural scale; level of industry collaboration to achieve value chain efficiencies



Infrastructure

Availability/ reliability of 'physical' infrastructure, banking ecosystem, technology platforms, human capital

## Detail: Typical challenges/ root causes inhibiting rural CICO expansion

Challenges			Root causes
\$ Economics	Revenues	Volume	<ul> <li>Small/ insufficient addressable consumer pool in catchment area to provide DFS/ CICO services to</li> <li>Lack of DFS/ CICO use cases limiting number of services that can be provided to any given consumer</li> <li>Limited consumer awareness and use inhibiting uptake and increase in transaction volume</li> <li>Fees charged superior to consumers' willingness to pay limiting use of DFS/ CICO services</li> <li>Limits imposed on transaction volumes/ amounts and types of services agents can provide</li> <li>Intense competition in rural areas diluting total potential volume across many providers and reducing viability for all</li> </ul>
		Price	<ul> <li>Inadequate commission structure negatively impacting providers/ agents viability in rural areas</li> <li>Low ceilings on DFS/ CICO fees (either due to regulations, industry practices or demand) not covering costs to serve</li> </ul>
	Costs	Agents	<ul> <li>High upfront investment required (e.g., business registration, EDC device)</li> <li>High ongoing costs - especially liquidity management costs (working capital requirement &amp; opportunity cost); lack of affordable financing options. Rent and other fixed costs could also be high for dedicated DFS agents</li> </ul>
		Providers	<ul> <li>Lack of strategic focus on rural expansion; competing priorities in urban areas (e.g., limited investment resources), and bias towards short-term ROI (i.e., limited interest in cross-subsidizing long-term rural market development)</li> <li>High operating costs (e.g., agent network management/monitoring, overhead, liquidity management)</li> </ul>
Regulatory environment			<ul> <li>Inhibiting/ constraining regulatory or policy frameworks - e.g., (i) Stringent KYC requirements undifferentiated by customer or account amount/ risk; (ii) Provider guidelines: restrictions on services non-bank providers can offer; (iii) Agent guidelines: restrictions on eligibility criteria including requirements to be dedicated, exclusive and authorized scope of activity; (iv) Caps, fees and charge regulations; (vi) taxes</li> </ul>
Operational complexity			<ul> <li>Legacy business decisions or limited technological/ business capabilities to innovate and optimize DFS technology, liquidity management and agent management processes for rural expansion</li> </ul>
OOO Industry dynamics			<ul> <li>High provider landscape fragmentation preventing any one provider from realizing economies of scale in rural areas</li> <li>Lack of industry collaboration preventing development of shared agents networks</li> </ul>
Infrastructure			<ul> <li>Lack of enabling 'physical' infrastructure: power grid, telco coverage, cash transit infrastructure for liquidity management, appropriate workforce, etc.</li> <li>Insufficient banking ecosystem: national unique ID system, interoperable payments technology, etc.</li> </ul>

## Rural CICO expansion might require broad range of interventions from government & inclusion stakeholders

Potential for near-term implementation & impact

Longer-term implementation & impact

## Incentives to make CICO economics more attractive

- Focusing providers' attention on the rural expansion imperative
- Improving short-term economics for providers/ agents to catalyze expansion
- Creating conditions for providers to invest/ innovate & improve long-term viability

### Innovation to develop new CICO & post-CICO models

- Solving operating model challenges in the frontier (e.g., new liquidity mgmt./ agent network mgmt. models)
- Developing new products/ services/ distribution channels for rural consumers, including new use cases that keep money digital (without resorting to CICO)

## New partnerships to support CICO/ DFS value chains

- Establishing pre-/ non-competitive spaces for financial players to co-develop shared agent networks and other CICO/ DFS infrastructure
- Brokering new partnership models with players across industries to conduct rural consumer research & develop new go-to-market approaches

### Data to improve CICO/ DFS network efficiency and effectiveness

Collecting, analyzing and using data to:

- Improve CICO access, utilization & sustainability
- Size number of new agents needed & optimize allocation for coverage & viability
- Estimate potential support/ investment required for viability
- Improve agent network mgmt. & reduce operating costs (e.g., liquidity mgmt.)

### Regulations to unlock/ enable CICO/ DFS expansion

Revising/ passing new regulations related to:

- Consumer/ agent KYC requirements
- Mobile money interoperability
- Transaction fees
- Provider/ agent eligibility criteria (incl. "dedication" & "exclusivity" criteria)
- Products/ services guidelines
- Third-party Agent Network Managers guidelines
- Taxes

## Large-scale investments in 'infrastructure'

- Extending physical/ technology/ banking infrastructure (e.g., mobile connectivity, electricity, roads, bank branches)
- Supporting financial platforms (national ID systems, central payments switches, mobile money interoperability)
- Investing in human capital/ workforce training (e.g., basic/ digital/ financial literacy)

Main focus of this work

## In particular, governments may consider direct economic incentives to catalyze near-term rural CICO expansion

### Inclusion guidelines

- 1 Mandates/ service obligations/ new urban opening restrictions
- 2 Coverage/ service level targets

## Direct provider/ agent profitability improvements

- 3 Preferred financing/loans
- 4 Research & innovation grants
- 5 Favorable government contracts
- 6 Income guarantees/ fee subsidies
- Price guidelines
- 8 Tax rebates or credits
- 9 Discounted inputs/ operational support

### **Demand generation**

- 10 Direct subsidies to endconsumers
- 11 Creation of new use cases
- 12 Consumer behavior shaping nudges (e.g., incentives/rewards)

# right © 2019 by Boston Consulting Group. All rights reserve

## Supply-side incentives typically introduced as a 'portfolio' combining short-term catalysts with longer-term market development

Category	Incentive levers	Description	
Inclusion guidelines	1 Mandates/ service obligations/ new urban opening restrictions	Requirement for providers to serve rural customers, regardless of underlying economics (internal cross-subsidization); typically executed via a financial inclusion policy mandate or via terms of provider licensing agreement	
	2 Coverage/ service level targets	Direct regulation of provider network expansion, incl. minimum coverage requirements in rural areas, restriction of licenses for new provider branches/ agents opening in saturated urban areas	
Direct provider/ agent profitability improvements	3 Preferred financing/ loans	Grants, no/low-interest loans, loan guarantees to help cover high upfront investments and/ or expansion costs, and reduce investment risk for providers, aggregators, and/ or agents	
	4 Research & innovation grants	Grants to fund (fully or partially) research and innovation efforts (by providers individually or by industry consortium as pre-competitive research) in order to conduct market and user research and adapt existing CICO/ DFS products, services and/or operating models to rural customer needs	
	5 Favorable government contracts	Government licensing agreement/ contract - created in collaboration with providers - with commercial terms that enable providers to recoup investments and earn a viable profit (fee structures aligned to cost to serve, potentially a right to operate in certain geographies exclusively/ without competition for a certain amount of time)	
	6 Income guarantees/ fee subsidies	Payment of 'income fee' by government to providers to add revenue (on top of payment from consumers) to ensure costs are covered and minimum profitability requirement is met	
	7 Price guidelines	Favorable DFS pricing guidelines to enable providers to cover costs or earn profit (e.g., revised caps, deregulation)	
	8 Tax rebates or credits	Reduced tax burden (e.g., registration, capex, income tax) to lower upfront investments or increase operating profits	
	9 Discounted inputs/ operational support	Provision of inputs at discounted prices or coverage of main operational cost drivers for providers, aggregators, agents (e.g., low-cost generators, dedicated public transportation leveraged for cash delivery to remote areas)	
Demand generation	Direct subsidies to end-consumers	Payment of fixed or variable amount to end-consumers (typically based on income level) to ensure affordability of access to and sustained consumption of service (e.g., discounted DFS transactions, personal credit to use DFS)	
	11 Creation of new use cases	Policies/ programs that increase customer adoption and utilization of DFS services, driving increase in total DFS transaction volumes (e.g. G2P digitization programs)	
	Consumer behavior shaping nudges	Behavioral nudges/ incentives to increase adoption and sustained use of DFS by end-consumers (e.g., showing benefits, reassuring on costs and risks)	

# right © 2019 by Boston Consulting Group. All rights reserved.

## Based on global study, 6 levers assessed as most promising, especially if combined...

### Levers

1 Mandates/ service obligations

2 Coverage/ service level targets

### Purpose

Drive quick expansion of providers/agents in frontiers

### **Examples**



#### India

Banks to open 25% of new branches in underserved areas each year



#### Malaysia

New agent points only allowed in "unserved areas" (with <2000 people and no CICO access)



#### Nigeria

Colombia

Preferred loans of up to \$1.5M to help MMOs expand operations

Decreasing income guarantee planned over three years to enable agents



#### Australia

CDFI Pilot Fund providing \$10M+ to test CDFI model in country



#### DR

\$100 monthly stipend provided to agents in first three months to aid set-up



#### Kenva

Tiered transaction fees to secure margins and ensure delivery in frontiers



#### Bangladesh

Digitization of children education benefits to 10M women in 2017



#### UK

MAS: Financial advice platform providing guidance to 10.5M in 2017

4 Preferred financing/loans

6 Income guarantees/ fee subsidies

7 Price guidelines

11 Creation of new use cases

Consumer behavior shaping nudges

To incentivize and de-risk

providers/agents initial set-up and operational model experimentation

To ensure economic viability in early days for agents and providers

To ensure fees cover cost to serve, fostering a healthy market for longer-term provider/agent viability<sup>1</sup>

To jump-start and build consumer demand for DFS

To support DFS adoption and usage for long-term (via awareness/ education campaigns and active behavior shaping)



## Pakistan

Digitization of \$900M of BISP social benefits to 5.4M women in 2016



#### USA

IDA accounts building savings habit of 115K consumers over time

# ight © 2019 by Boston Consulting Groun All rights reserved

## ... and key design principles/ best practices gathered



Build intervention as a combination/ sequence of 'push' and 'pull' levers to create impetus for rural expansion in near-term and develop demand for CICO/ DFS for long-term



Allow for multi-year investments; interventions will typically take longer to be successful (5-10 years more likely) than designed for (3-4 years)



While may distribute incentive via providers to be efficient and at-scale, need to design intervention for needs and habits of agents/consumers to ensure adoption and usage



Design interventions to mitigate risks (e.g., market distortion, gaming) to ensure that providers/ agents have built viable business in frontiers by the time intervention is removed



Collaborate closely with providers for design to ensure that interventions are operationally feasible, aligned with strategic priorities, and that incentives cover costs to serve



Define and agree with providers on simple, practical, easy-to-track targets and indicators (e.g., that do not require agent level audits) in order to serve as guideposts for design



Foster competition amongst/ and leave room for flexibility on specific implementation details to providers in order to reduce costs and increase efficiency of intervention



Allow time/ budget upfront in intervention to corefine of targets and evaluation framework with providers; Regularly measure, learn and iterate design to ensure impact over time





Role of CICO in financial inclusion

Why is CICO important for financial inclusion?

What defines a successful CICO agent network?



Sizing the CICO access challenge

What is the size of the CICO coverage gap in key markets?



Exploring potential interventions

What are challenges/ root causes to CICO expansion today?

What are potential interventions to catalyze CICO expansion?



Path forward & country application

What does the path forward look like?

How can we think about developing market-specific CICO strategies?

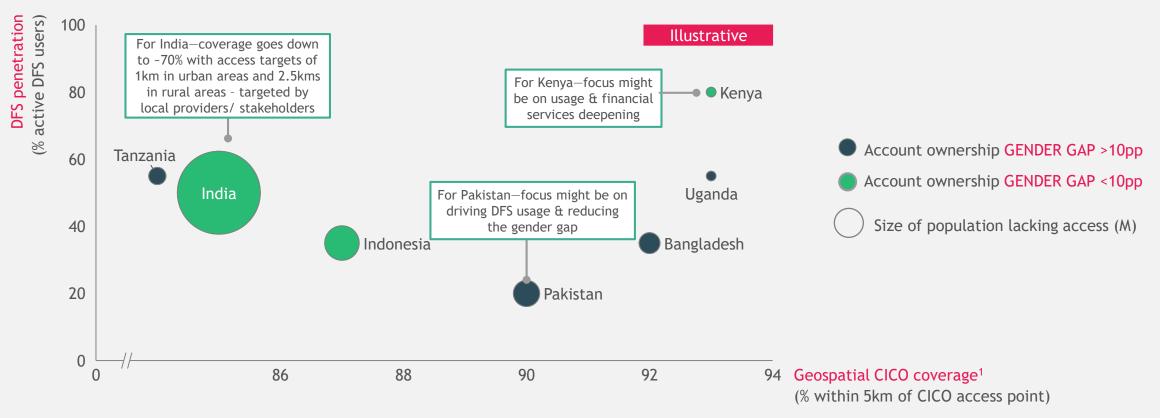
What roles should key stakeholders play?

Looking ahead, how can global insights be translated into context-specific **CICO** strategies developed in partnership with incountry stakeholders?



## Path forward will involve defining context-specific CICO expansion/improvement priorities for country

While some countries may focus on expanding access; others may focus on improving DFS quality & equity



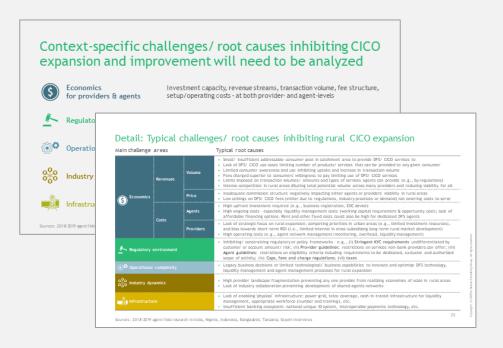
Note: CICO coverage statistic reflects BCG Geospatial analysis of population access to bank, ATM, or agent. DFS penetration estimate informed by Findex and Finclusion statistics (% made or received digital payment in the last year, % sent or received domestic remittances using an account, % active bank user, registered mobile money user or OTC user).

Source: BCG geospatial analysis; 2017 Finclusion country reports (Finclusion, 2017); Global Findex report 2017 (World Bank, 2017)

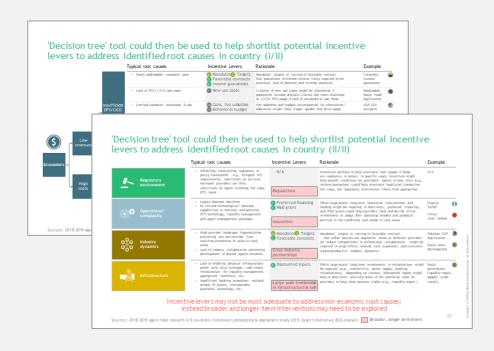
# averight © 2019 by Boston Copyriting Group All rights reserv

## Will also need to analyze context-specific root causes and identify relevant levers to address them

Underlying root causes to be tackled will vary by market...



... Requiring different interventions combinations to be designed



# right © 2019 by Boston Consulting Group. All rights reserved

## Key stakeholders will need to work together and play specific roles to catalyze CICO expansion/improvement



## Governments/ Central Banks

- Define how CICO expansion contributes to overarching financial inclusion agenda and set goals
- Set CICO expansion and improvement priorities
- Engage providers & other relevant stakeholders to discuss current obstacles and required interventions (incl. incentives)
- Implement enabling policies, incl. new funding/ financing vehicles and regulatory reforms



## Providers (e.g., Banks, MNOs, fintechs)

- Pursue opportunities for viable rural CICO expansion in support of national financial inclusion agenda
- Innovate and explore with new, potential business and operating models to address key challenges in rural areas
- Collaborate with governments on local root causes preventing CICO expansion & interventions; provide input on interventions and incentives required



Non-exhaustive

## Philanthropies & NGOs

- Expand global knowledge base on CICO best practices, challenges, and interventions
- Facilitate discussions between government and providers across sectors to align on and address key challenges
- Support/ fund rural expansion programs and pilots; conduct additional field research as needed

